

Q1/2018 Q1/2018
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April 10, 2017
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ARCELORMITTAL STEEL USA

OCTOBER THROUGH DECEMBER 2016
DIESEL FUEL FREE PRODUCT RECOVERY
Locomotive and Mobile Equipment Shop

250 WEST US HIGHWAY 12
BURNS HARBOR, INDIANA

PREPARED BY



Weaver
Consultants
Group

7121 Grape Road
Granger, Indiana 46530
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April 10, 2017

Ms. Theresa Kirk, Environmental Engineer
ArcelorMittal Burns Harbor, LLC
250 West U.S. Highway 12
Burns Harbor, IN 46304-9745

Re: Quarterly Report
October 2016 through December 2016
Diesel Fuel Free Product Recovery
Locomotive and Mobile Equipment Shop

Dear Ms. Kirk:

Weaver Consultants Group, LLC (WCG) has completed this report as described in WCG Budgetary Quote M90405T, dated March 18, 2016, and as authorized by ArcelorMittal Steel USA (ArcelorMittal) Purchase Order B495986 (Rev. 002). This report provides additional data subsequent to the 2Q2015 closure and termination request report, including the installation of three additional piezometers, groundwater sampling results, and data pertaining to continued passive operations during 4Q2016.

BACKGROUND INFORMATION AND PURPOSE

A subsurface release of diesel fuel was discovered north of the Locomotive and Mobile Equipment Shop during a routine construction project in December 2007 at the location shown on **Figure 1**. The release was encountered during excavation for a foundation pier for a new locomotive fuel dispensing system. A likely source of the release was subsequently found to be the underground pipe that formerly conveyed the diesel fuel from the above ground storage tank (AST) to the former locomotive fueling rack at the locations shown on **Figure 2**.

Immediate responses mounted by ArcelorMittal included the use of a vacuum truck to recover liquid diesel fuel and water found perched in shallow subsurface fill soil. Follow-up responses included the excavation and off-site disposal of approximately 3,100 cubic yards of diesel fuel-impacted soil and recovery of liquid diesel fuel using a vacuum truck beginning on December 5, 2007. The volume of diesel fuel vacuumed directly from the excavation was not measured or tallied, but is estimated by WCG to have comprised

several thousand gallons based on our visual observations of the effort. When the excavation was concluded April 8, 2008, soil samples indicated that the sidewall banks were remediated to Indiana Department of Environmental Management (IDEM) industrial default closure levels. The approximate extent of excavation is illustrated on **Figure 2**. The occurrence of groundwater at approximately 8 to 10 ft below ground surface precluded the removal of deeper soils exceeding industrial default closure levels at the base of the excavation, as did the need to restore two rail lines that were temporarily removed to facilitate the remediation. By May 6, 2008, the excavation was backfilled and replacement of the tracks was substantially complete. The foregoing response actions are described in the following report: *Corrective Action Completion Report for Diesel Fuel-Impacted Soil*, July 31, 2008, Weaver Boos Consultants, LLC, South Bend, Indiana.

As the soil remediation was being completed in early 2008, ArcelorMittal was aware that free product remained along the surface of the water table, and therefore retained WCG to design, install, and operate a free product recovery system utilizing vacuum enhanced in-well skimming technology. The free product recovery system was completed and placed into operation on March 18, 2009 as described in the following report: Progress Report, Diesel Fuel Free Product Recovery, Locomotive and Mobile Equipment Shop, dated August 4, 2009. Active system operations were suspended on June 10, 2016, after which passive operations were initiated using absorbent socks in each of the recovery wells. This report summarizes the installation of three additional piezometers, groundwater sampling results, and data pertaining to continued passive operations during 4Q2016.

INVESTIGATIVE FIELDWORK

Investigative fieldwork during 4Q2016 was performed pursuant to the September 28, 2016 Sampling and Analysis Plan (SAP) prepared by WCG. The SAP specifies the sampling locations, sampling methods, and provides Standard Operating Procedures (SOPs) for subsurface soil sampling and groundwater sampling. The SOPs are omitted herein for brevity.

Three additional down gradient piezometers (FP-4, FP-5, and FP-6) were drilled on November 8 and 9, 2016 at the locations shown on **Figure 2**. Drilling was performed on behalf of WCG by K&S Engineers, Inc., who used a truck-mounted rotary drill rig turning

4.25-inch I.D. hollow stem augers. Standard penetration tests and split-barrel soil samples were collected at continuous intervals and visually examined by a qualified WCG geologist as they were collected. A photoionization detector calibrated to an isobutylene standard was used to field screen the samples as they were collected. Soil boring logs and piezometer construction diagram are provided in **Appendix A**. Geospatial data for the new and existing piezometers and remediation wells are listed **Table 1**. Each of the monitoring wells was developed by bailing and pumping approximately 25 gallons until the flow cleared substantially. Development water was containerized and delivered to ArcelorMittal's designated on-site discharge point.

The new and existing piezometers and remediation wells were sampled for benzene, toluene, ethylbenzene, total xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs) on November 18, 2016. The samples were acquired using a low-flow 12-volt submersible pump operated to minimize groundwater drawdown. Water levels, pH, specific conductivity, and temperature were monitored for stability while the wells were purged. Stability was demonstrated after the purging of approximately 12 liters of water from each well and the samples were containerized directly from the pump discharge using containers provided by ArcelorMittal's contract laboratory, Microbac Laboratories, Inc. Purge water was placed into the free product accumulation tank. The Groundwater Sampling Field sheets in **Appendix B** provide a record of sampling at each well. The samples were sealed, iced, documented using a chain of custody form, and hand delivered to the laboratory by WCG personnel.

PASSIVE DIESEL FUEL RECOVERY OPERATIONS

Active operations were suspended on June 10, 2016. Passive operations continued during 4Q2016 and included weekly checking of the absorbent socks and wringing them out to recover absorbed diesel fuel. Manual bailing of two of the new piezometers was also implemented. Report forms describing passive free product recovery operations between October 7, 2016 and December 30, 2016 are provided in **Appendix C**.

RESULTS

Subsurface Conditions and Groundwater Flow Direction

Subsurface conditions encountered while drilling piezometers FP-4, FP-5, and FP-6 were similar to those encountered elsewhere on the site and consisted of a thin layer of slag

at the surface underlain by medium sand. Petroleum odors were encountered while drilling all three piezometers. A chemical or ammonia-like odor was also encountered while drilling piezometer FP-5. Groundwater was encountered while drilling at depths ranging from 13.9 to 16 ft below ground surface as indicated in the soil boring logs.

Following development and stabilization, groundwater levels were measured during sampling on November 18, 2016. The depth to groundwater in each wells ranged from approximately 10 to 11 ft below ground surface. Groundwater level measurements reduced to groundwater surface elevations listed in **Table 2** were mapped to the site as shown on **Figure 3**. Groundwater was determined to flow westerly at a gentle gradient of approximately 0.006 ft/ft.

No free product was observed in any of the remediation wells or in piezometers FP-1 or FP-6. A maximum of 0.73 ft of apparent diesel fuel was found in piezometer FP-4 and 0.20 ft was measured in piezometer FP-5 on November 18. The fluid level elevations used in determining the groundwater flow direction listed on **Table 2** are corrected for free product in FP-4 and FP-5 using a specific gravity of 0.8 and so the inferred groundwater flow direction is considered representative of actual conditions.

Diesel Fuel Recovery Operations

Approximately 1,425 gallons of diesel fuel and approximately 2,512 gallons of ancillary groundwater have been recovered since remediation began on March 18, 2009. The remediation system was shut down and pumps removed and replaced with passive absorbent socks on June 10, 2016. Weekly wringing of the socks during 4Q2016 is estimated to have yielded less than 1 gallon of free product. The quantities of diesel fuel and water collected by the remediation system are summarized on **Table 3**. For 4Q2016, the final volume of fuel in the accumulation tank increased by 7 gallons from 3Q2016. Most of the free product recovered during 4Q2016 is attributed to groundwater purge fluids and weekly bailing of piezometers FP-4 and FP-5. Such fluids were placed into the remediation system accumulation tank. Piezometer FP-4 typically shows approximately 4 inches of free product each week before it is purged by bailing.

Cumulative diesel fuel recovered is charted as shown on **Figure 4**. The chart of cumulative free product recovered shows relatively rapid and steady accumulation through 2009 when 598 gallons were recovered. After 2009, the accumulation of free

product tapered. An increase in the rate of accumulation of free product occurred in the spring/summer of 2010, 2011, 2012, and 2013. Seasonality of free product recovery remains apparent as shown on the following table, but the quarterly collection of free product as a whole has trended to de minimis quantities.

Quarter	Year							Subtotals:	Percent of Subtotal:
	2010	2011	2012	2013	2014	2015	2016		
1Q	16	17	13	19	3	3	1	72	8.65%
2Q	71	64	12	69	22	10	0	248	29.81%
3Q	73	198	30	104	9	7	0	421	50.60%
4Q	32	16	23	10	0	2	7	90	10.82%
Subtotals:	192	295	78	202	34	22	8	832	100.00%

The calculated rate of diesel fuel recovery (gallons per day) is charted on **Figure 5**. Negative rates reflect either difficulty in accurately reading the water level in the accumulation tank by our operator who uses color-changing water-finding paste applied to a tape measure for this purpose, or possibly the cross-dissolution of water and oil between the separate liquid phases. Several peaks approaching 8 gallons per day are indicated early in the recovery operation, but the average rate is much lower.

The apparent thickness of free product measured in recovery wells RW-1, RW-2, RW-3, and RW-4 is listed in **Table 4**. The thickness is described as “apparent” because it represents what is present in the well at the time of measurement and does not necessarily represent the thickness of mobile free product in the aquifer. The actual thickness in the aquifer formation is usually less than the apparent thickness measured in a well. Time trends of apparent free product thickness are charted for the recovery wells as shown in **Figure 6**. The apparent thickness of free product measured during 4Q2016 remained zero in RW-1, RW-2, RW-3 and RW-4. Additionally, no free product was encountered in piezometers FP-1 or FP-6 during 4Q2016.

Groundwater Sampling Results

Groundwater samples were collected from piezometer FP-1, FP-4, FP-5, FP-6 and the remediation wells RW-1, -2, -3, and RW-4 to assess the extent of dissolution of petroleum hydrocarbons from the residual diesel fuel to the aqueous phase of the

underlying groundwater. The samples were collected on November 18, 2016. The complete results are provided in **Appendix D**.

Results obtained for the samples are summarized on **Table 5** and compared with IDEM's RISC industrial default closure levels and IDEM's RCG screening levels for vapor intrusion at industrial sites. No benzene was detected in piezometer FP-1 and none was detected in remediation wells RW-1, -2, -3, or RW-4. Other compounds were either not detected, or if detected, the concentrations were well below their respective industrial default closure levels. These results indicate that diesel fuel recovery operations and remediation has been effective in reducing dissolved phase concentrations throughout the original corrective action target area.

In the new piezometers FP-4, FP-5, and FP-6, benzene was detected at concentrations of 210 ug/L, 200 ug/L, and 110 ug/L, respectively. These concentrations somewhat exceed the applicable screening level of 52 ug/L, suggesting that impacts to dissolved phase groundwater quality may extend further westerly than previously explored. Other BTEX and PAH compounds were either not detected, or their concentrations were well below their respective screening levels. These results are mapped to the site as shown on **Figure 7**.

CONCLUSIONS

With consideration for our observations, measurements, results obtained, and the relevant standards for assessing the effectiveness of corrective measures for petroleum release(s), WCG concludes the following consistent with prevailing professional principles and practice:

1. Remediation of the original corrective action target area is complete to the extent practicable. Only one gallon of free product was collected from RW-1, RW-2, RW-3, and RW-4 during 2016 and current groundwater monitoring results indicate compliance with all applicable screening levels in this area. Free product has also been eliminated from these wells by passive absorbents with essentially no yield during 2016.

2. The occurrence of free product in the new piezometers FP-4 and FP-5, as well as the detection of somewhat elevated concentrations of benzene in FP-4, FP-5, and FP-6 suggests that diesel fuel impacts may extend further downgradient to the west than previously explored. Weekly manual bailing of FP-4 and FP-5 beginning on November 18, 2016 has thus far yielded approximately six gallons of free product.
3. The affected area of the Locomotive and Mobile Equipment Shop is located approximately 1,900 ft from the nearest property boundary (to the west) and approximately 2,700 ft from the nearest surface water body, which is the east harbor arm of the Ports of Indiana harbor located to the northwest. Considering the low levels of benzene impact, gentle groundwater flow gradient, and natural attenuation for diesel fuel in an oxygenated shallow sand aquifer, impact to groundwater quality and the extent of diesel fuel free product migration is expected to remain well within the footprint of ArcelorMittal's property indefinitely, irrespective of future intervention.

RECOMMENDATIONS

WCG recommends that consideration be given to connecting piezometers FP-4 and FP-5 to the vacuum enhanced free product skimming system such that recoverable diesel fuel is collected in the existing accumulation tank using the same system drawing from remediation wells RW-1 through RW-4. WCG also recommends that consideration be given to assessing for the presence of diesel fuel impacts further to the west and southwest of the existing remediation target area, although it is noted that such an effort may be technically impracticable because of conflicts with essential plant traffic, underground utilities, and other ArcelorMittal facilities located to the west and southwest of the Locomotive and Mobile Equipment Shop.

Qualifications and Limitations

WCG prepared this Report using a defined scope of services considered appropriate and agreed upon by all parties on the date the service was authorized and in accordance with generally accepted practices in a manner consistent with that level of care exercised by other members of our profession in the same locality and practicing under

Ms. Theresa Kirk
April 10, 2017
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similar circumstances. Our professional opinions are based upon our review of historical data and information, our visual observations of the subsurface conditions, and the results we obtained during remediation and monitoring. Conditions in areas not specifically sampled or analyzed may differ. Although the scope of work is believed by WCG to be appropriate to address the stated objectives, we note that no environmental assessment can completely eliminate uncertainty with respect to the presence, nature, concentration, or extent of contaminants of potential concern in soil or groundwater.

WCG appreciates this opportunity to be of service. If you should have any questions or comments concerning this report, please do not hesitate to call us at (574) 271-3447.

Very truly yours,
Weaver Consultants Group, LLC



Steven M. Stanford, LPG
Manager, Granger Environmental Operations

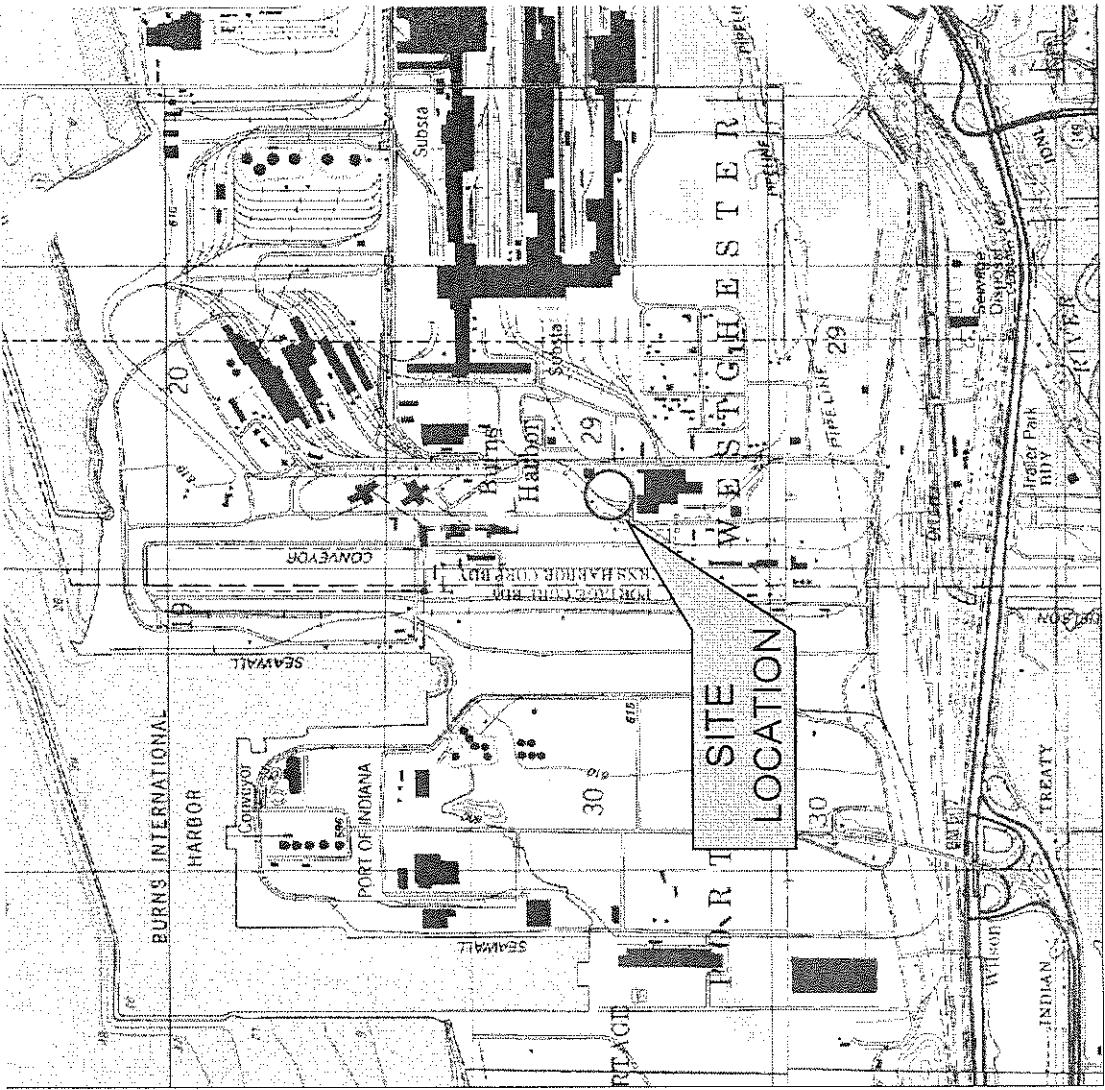


David Ekkens,
Environmental Specialist

Attachments:

- Figure 1 – Site Location Map
- Figure 2 – Site Plan and System Layout
- Figure 3 – Potentiometric Surface Map
- Figure 4 – Cumulative Free Product Recovery
- Figure 5 – Rate of Diesel Fuel Recovery
- Figure 6 – Apparent Thickness of Free Product in Wells
- Figure 7 – Groundwater Sampling Results
- Table 1 – Monitoring and Remediation Well Information
- Table 2 – Water Level Elevations
- Table 3 – Diesel Fuel Free Product Recovery Summary
- Table 4 – Apparent Thickness of Free Product in Wells
- Appendix A – Soil Boring Logs
- Appendix B – Field Sampling Data Sheets
- Appendix C – Weekly Operations and Maintenance Reports
- Appendix D – Groundwater Sampling Analytical Report

FIGURES



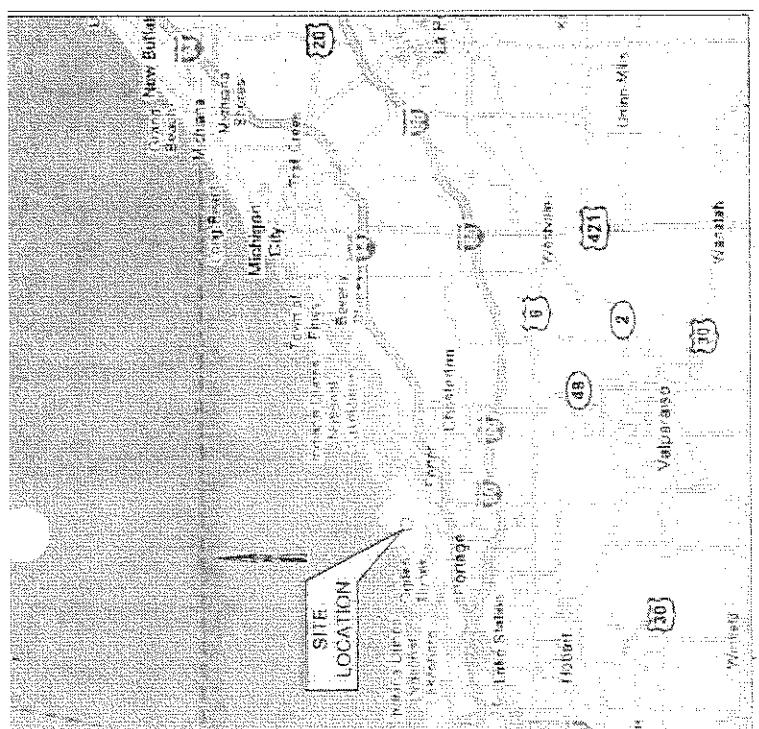
LOCATION MAP

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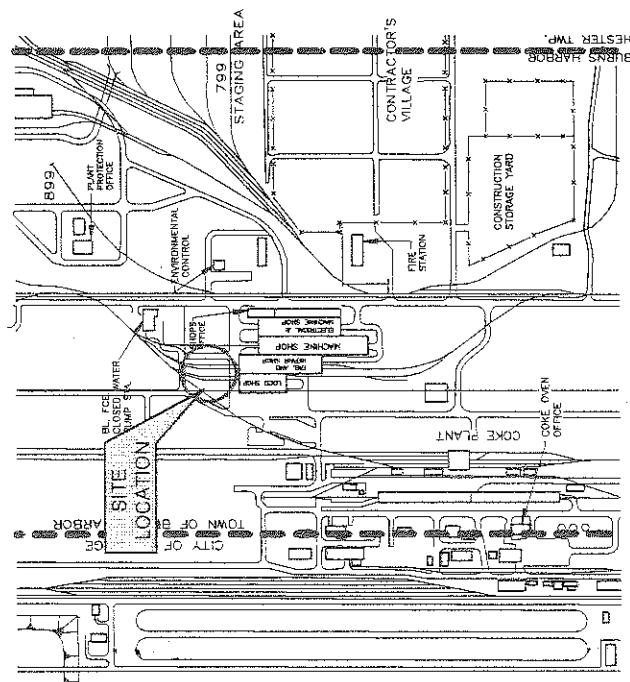


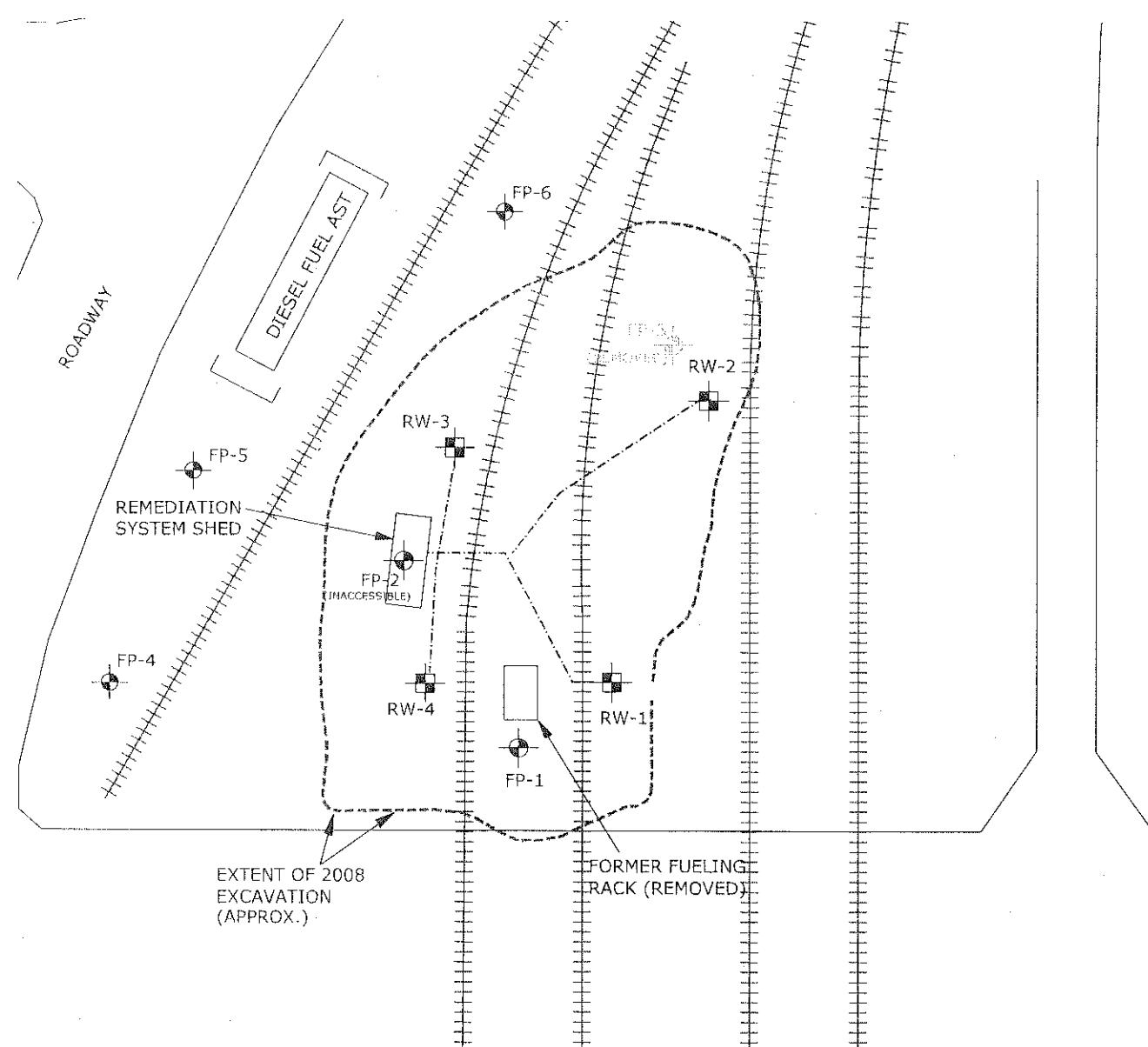
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VICINITY MAP

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LEGEND:

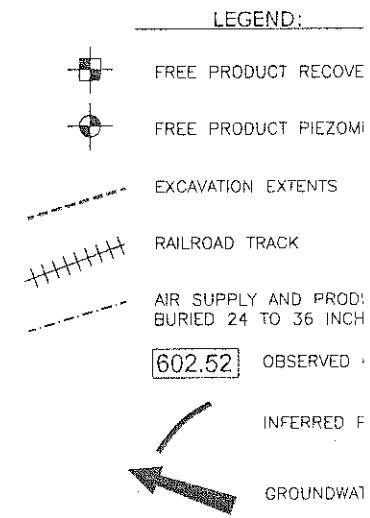
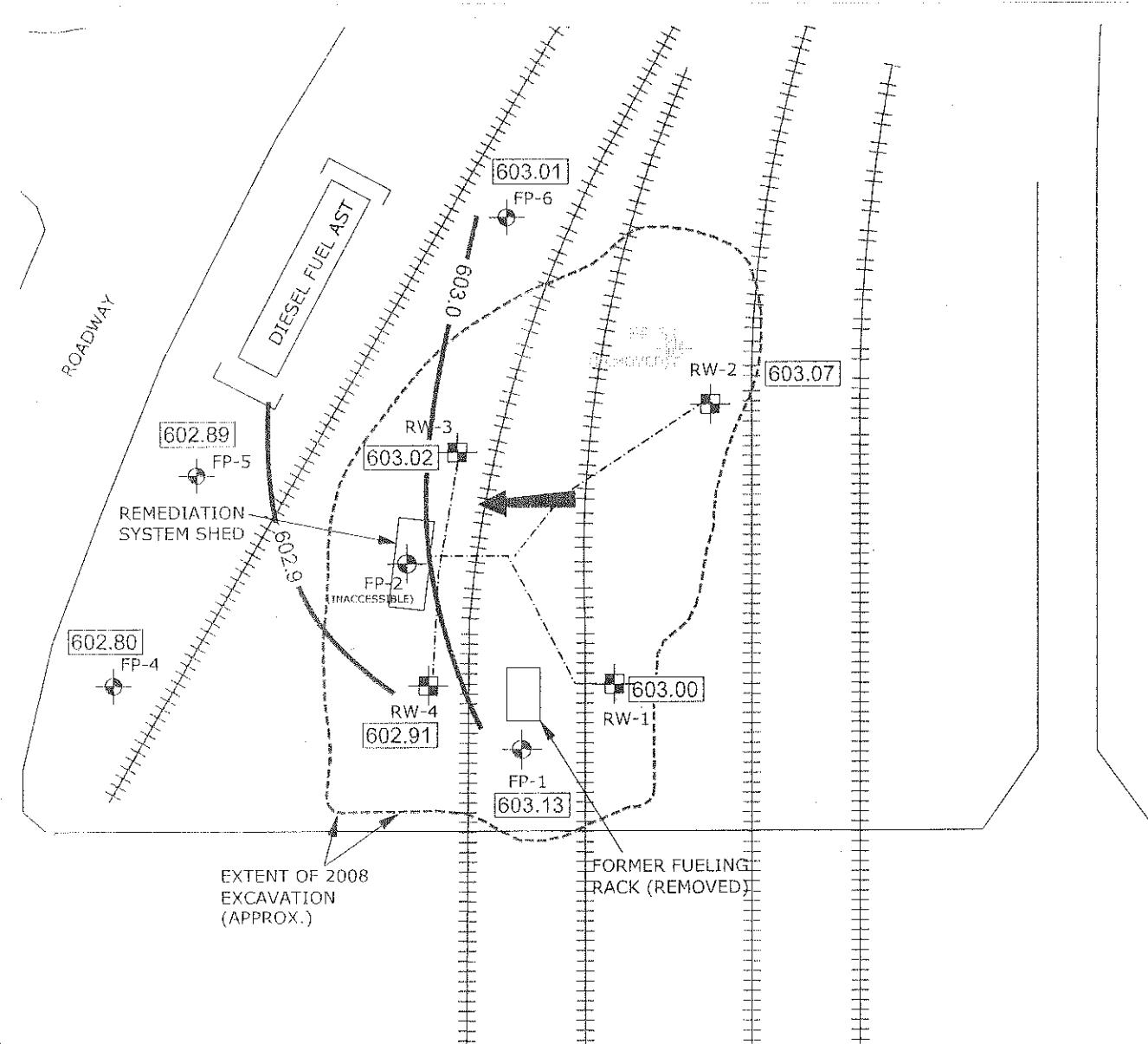
- FREE PRODUCT RECOVE
- FREE PRODUCT PIEZOMI
- EXCAVATION EXTENTS
- RAILROAD TRACK
- AIR SUPPLY AND PROD BURIED 24 TO 36 INCH

NOTES:

1. LAND SURFACE ELEV IS APPROXIMATELY 6
2. EXCAVATION FOR CO DIESEL FUEL IMPACT DEPTH OF APPROXIM BELOW GRADE (EL. 1
3. EXCAVATION WAS BASED ON RAILROAD TRACKS REMOVED

DOOR 0053	DOOR 075	DOOR 076N	DOOR 077N	DOOR 078N	DOOR 0052
EXISTING LOCOMOTIVE AND MOBILE EQUIPMENT SHOP			EXISTING FABRICATING AND CAR REPAIR SHOP		





- NOTES:
1. LAND SURFACE ELEV/ IS APPROXIMATELY 6
 2. EXCAVATION FOR CO₂ DIESEL FUEL IMPACTE DEPTH OF APPROXIM/ BELOW GRADE (EL. E
 3. EXCAVATION WAS BACK TO RAILROAD TRACKS RE

DOOR 0053	DOOR 075	DOOR 076N	DOOR 077N	DOOR 078N	DOOR 0052
EXISTING LOCOMOTIVE AND MOBILE EQUIPMENT SHOP			EXISTING FABRICATING AND CAR REPAIR SHOP		

FIGURE 4
Cumulative Free Product Recovered
Locomotive and Mobile Equipment Shop

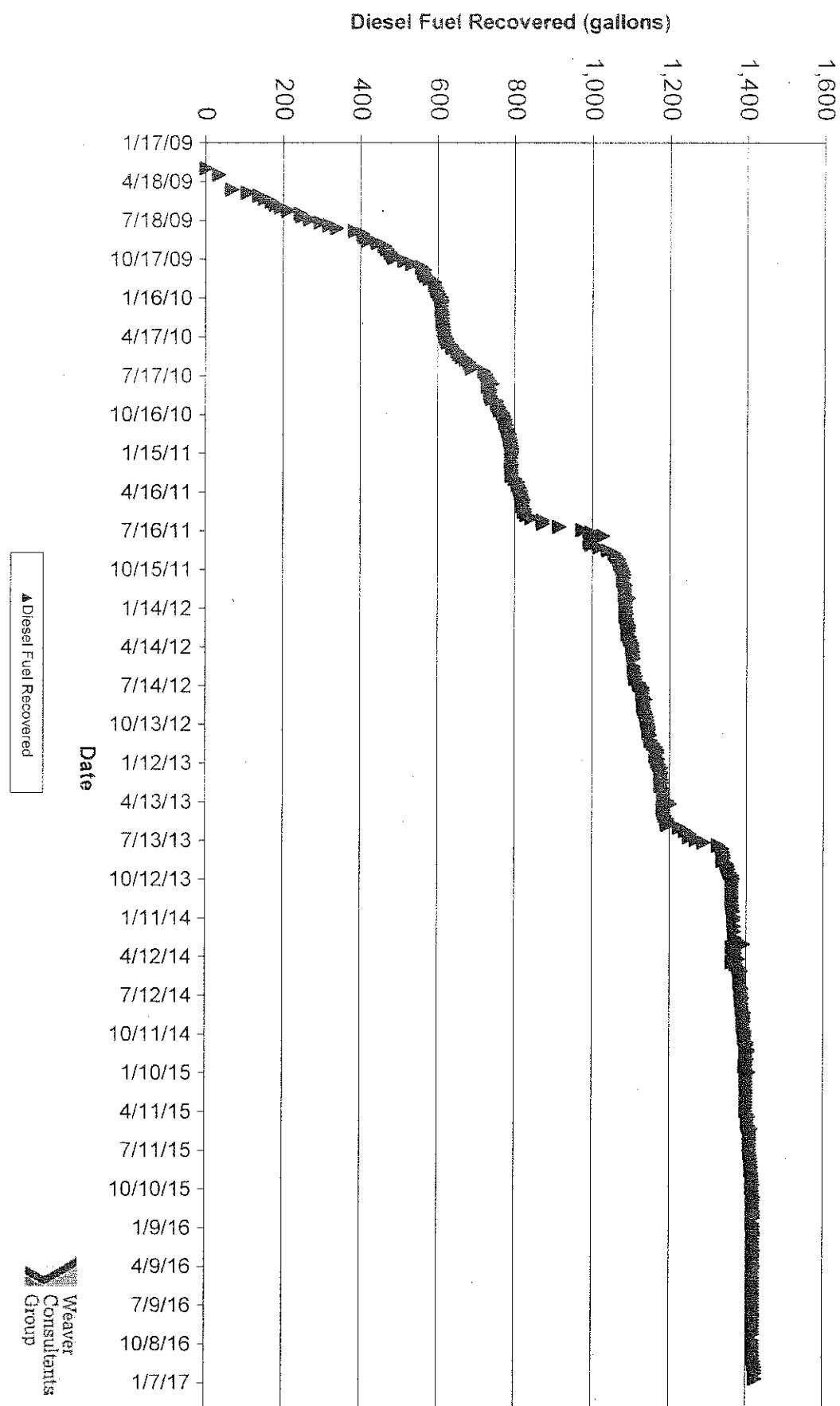


FIGURE 5
Rate of Diesel Fuel Recovery (gallons per day)
Locomotive and Mobile Equipment Shop

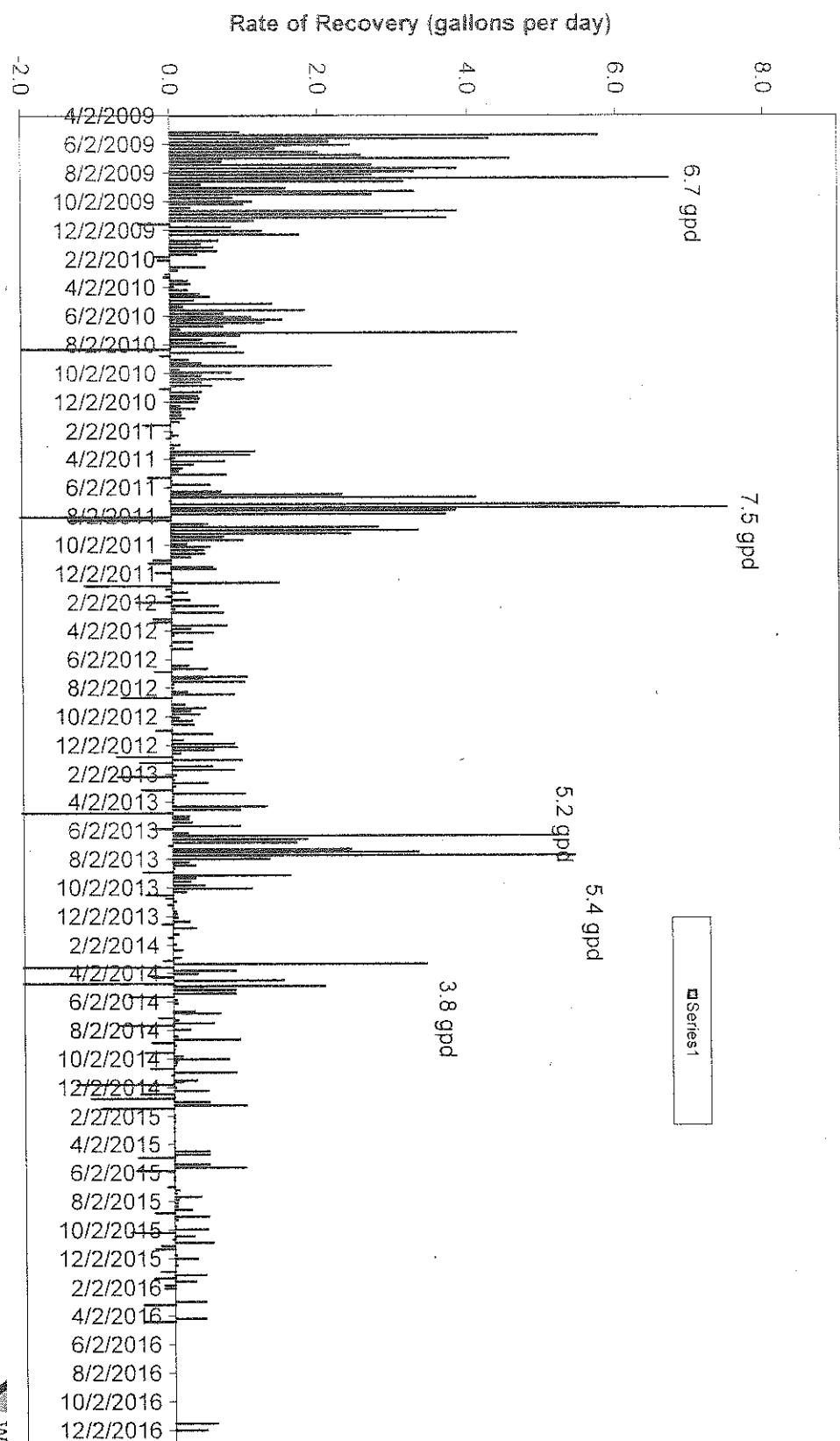
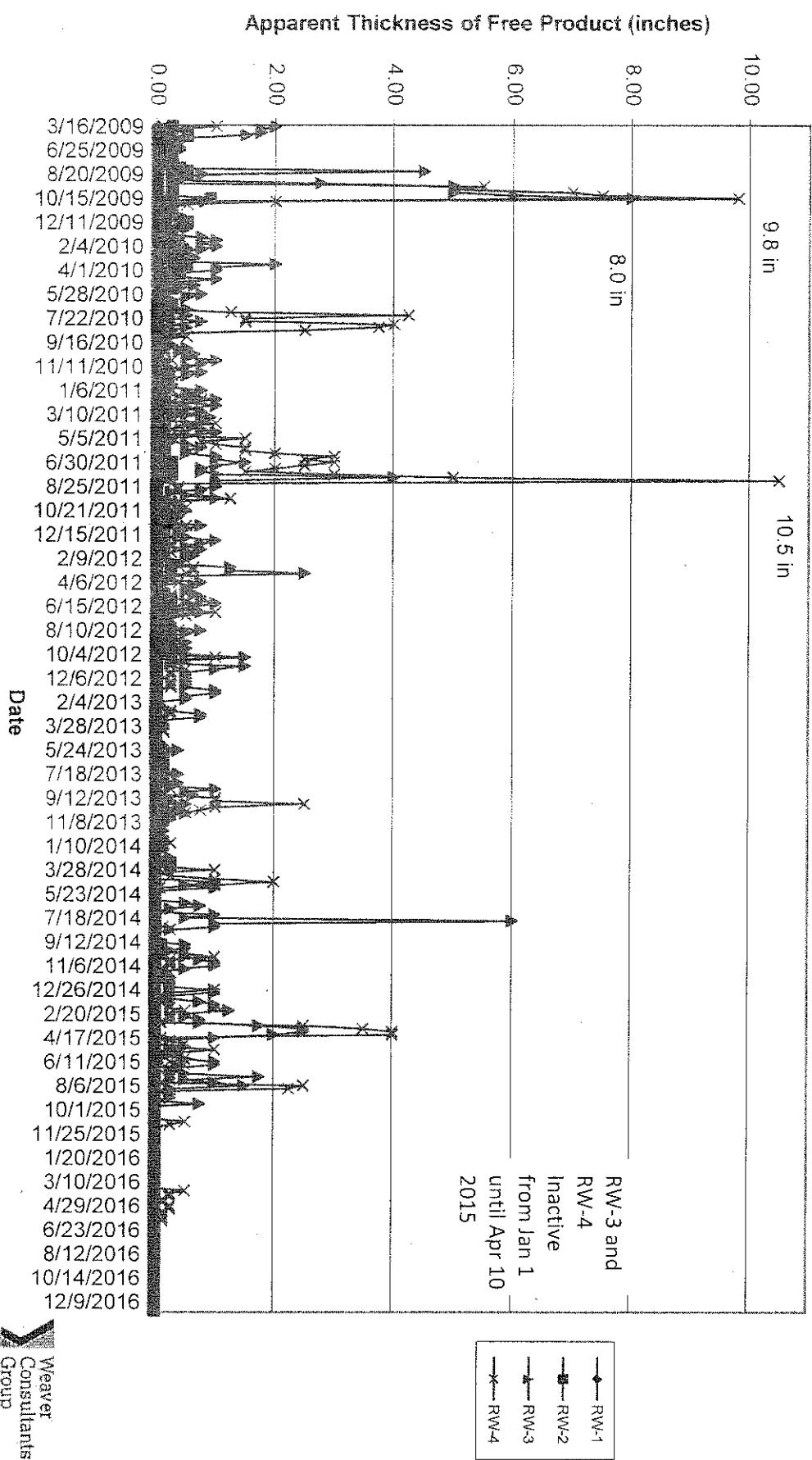
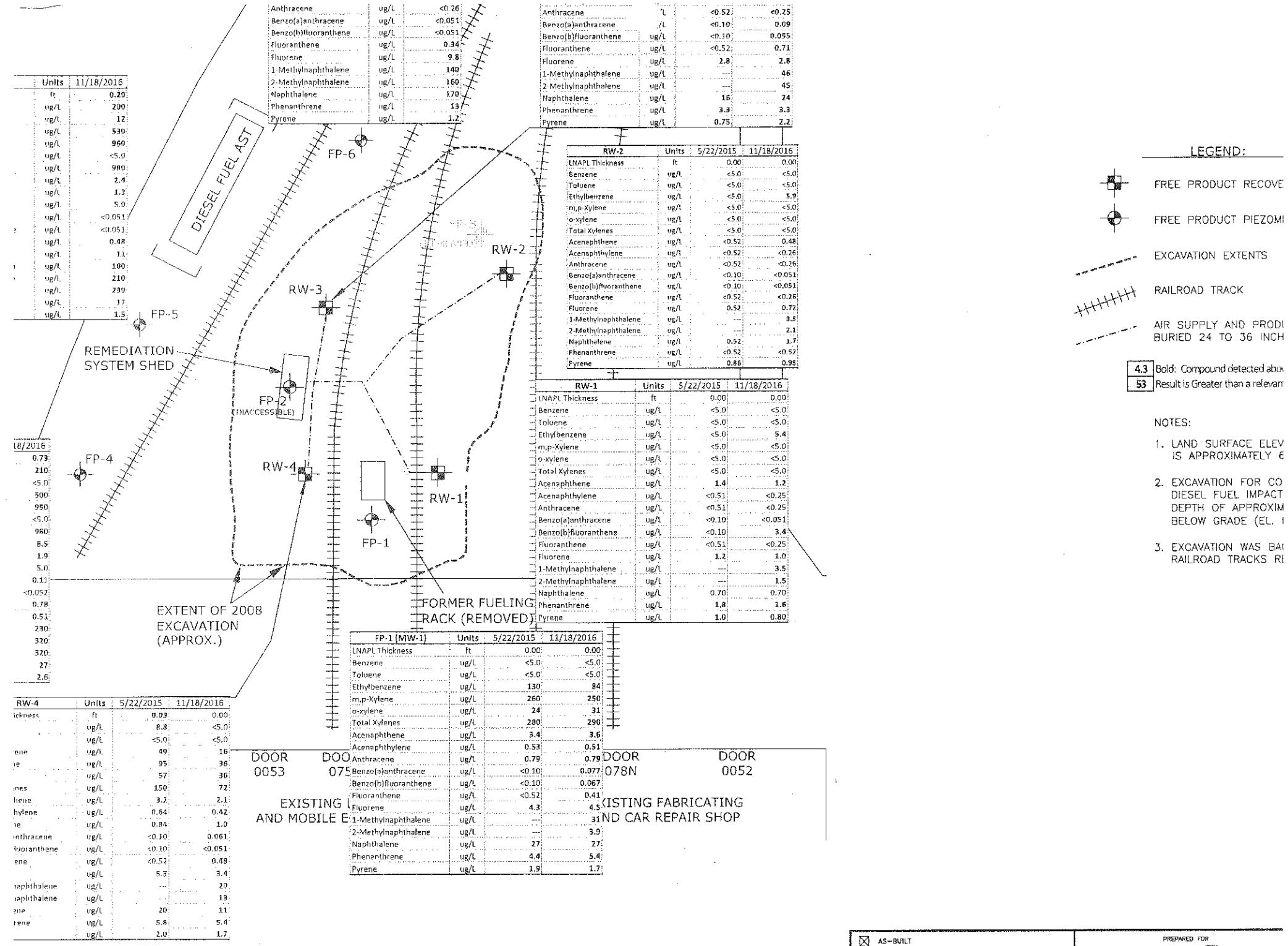


FIGURE 6
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Shop





TABLES

TABLE 1
Monitoring and Remediation Well Information
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Well I.D.	Date Drilled	Easting (ft, NAD83)	Northing (ft, NAD83)	Top of Pipe Elevation (ft, NAVD88)	Total Depth of Well (ft)	Length of Screen (ft)
FP-1	5/13/2008	484,015	1,504,225	612.86	20	10.0
FP-2	5/13/2008	483,992	1,504,268	---	20	10.0
FP-3	5/13/2008	484,052	1,504,322	---	20	10.0
FP-4	11/9/2016	483,918	1,504,240	617.13	19	10.0
FP-5	11/10/2016	483,938	1,504,291	617.10	19	10.0
FP-6	11/11/2016	484,012	1,504,353	616.58	20	10.0
RW-1	10/31/2008	484,037	1,504,240	613.47	20	10.0
RW-2	10/31/2008	484,061	1,504,308	613.43	20	10.0
RW-3	11/3/2008	484,000	1,504,297	613.38	20	10.0
RW-4	11/3/2008	483,993	1,504,240	613.63	20	10.0

1 - Piezometer FP-2 is under the remediation system shed and inaccessible.

2 - Piezometer FP-3 was destroyed during site restoration after excavation of diesel fuel-impacted soil.

TABLE 2
Water Level Elevations
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Well I.D.	Top of Pipe Elevation (ft, NAVD88)	Date of Measurement	Depth to Water (ft)	Groundwater or Surface Water Elevation (ft, NAVD88)
FP-1 (MW-1)	612.86	5/29/2015	10.88	601.98
		11/18/2016	9.73	603.13
FP-4	617.13	5/29/2015	N.I.	N.I.
		11/18/2016	14.33	602.80
FP-5	617.10	5/29/2015	N.I.	N.I.
		11/18/2016	14.21	602.89
FP-6	616.58	5/29/2015	N.I.	N.I.
		11/18/2016	13.57	603.01
RW-1	613.47	5/29/2015	11.29	602.18
		11/18/2016	10.47	603.00
RW-2	613.43	5/29/2015	11.22	602.21
		11/18/2016	10.36	603.07
RW-3	613.38	5/29/2015	11.40	601.98
		11/18/2016	10.36	603.02
RW-4	613.63	5/29/2015	11.59	602.04
		11/18/2016	10.72	602.91
Lake MI	---	5/29/2015	---	580.50 ¹
		11/18/2016	---	581.90 ¹

Notes:

N.I. - Well was not installed at this time.

--- - Not applicable

1 - Measured by fixed instrumentation at south end of east harbor arm on Lake Michigan.

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
3/18/2009	0	0	0	0
4/2/2009	9	9	33	33
5/7/2009	17	17	67	67
5/14/2009	15	15	107	107
5/21/2009	21	21	137	137
5/28/2009	19	19	152	152
6/4/2009	22	22	169	169
6/11/2009	25	25	179	179
6/18/2009	25	25	193	193
6/25/2009	21	21	211	211
7/2/2009	23	23	243	243
7/9/2009	25	25	248	248
7/16/2009	25	25	267	267
7/23/2009	26	26	294	294
7/30/2009	26	26	317	317
8/6/2009	26	26	336	336
8/13/2009	12	38	47	383
8/20/2009	12	38	69	405
8/27/2009	12	38	72	408
9/3/2009	12	38	83	419
9/10/2009	13	39	106	442
9/17/2009	13	39	125	461
9/24/2009	13	39	131	467
10/2/2009	14	40	140	476
10/8/2009	15	41	146	482
10/15/2009	15	41	148	484
10/22/2009	16	42	175	511
10/29/2009	16	42	195	531
11/5/2009	31	57	221	557
11/12/2009	47	73	229	565
11/19/2009	57	83	226	562
11/25/2009	62	88	231	567
12/3/2009	62	88	241	577
12/11/2009	62	88	255	591
12/18/2009	63	89	255	591
12/24/2009	64	90	259	595
12/31/2009	64	90	262	598
1/7/2010	62	88	266	602
1/15/2010	62	88	271	607
1/22/2010	59	85	274	610
1/27/2010	62	88	273	609
2/4/2010	63	89	272	608
2/12/2010	63	89	272	608
2/18/2010	62	88	275	611
2/25/2010	64	90	276	612
3/5/2010	66	92	275	611
3/12/2010	67	93	274	610

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
3/19/2010	67	93	276	612
3/26/2010	68	94	278	614
4/1/2010	69	95	278	614
4/8/2010	70	96	280	616
4/16/2010	70	96	283	619
4/22/2010	70	96	287	623
4/30/2010	70	96	289	625
5/7/2010	71	97	299	635
5/14/2010	73	99	300	636
5/21/2010	73	99	313	649
5/28/2010	75	101	318	654
6/4/2010	75	101	326	662
6/10/2010	75	101	335	671
6/17/2010	75	101	344	680
6/24/2010	3	104	5	685
7/1/2010	3	104	6	686
7/8/2010	6	107	38	718
7/14/2010	29	130	44	724
7/22/2010	42	143	47	727
7/29/2010	98	199	53	733
8/6/2010	151	252	60	740
8/12/2010	204	305	48	728
8/19/2010	245	346	55	735
8/26/2010	286	387	54	734
9/3/2010	313	414	56	736
9/10/2010	327	428	59	739
9/16/2010	7	435	13	752
9/24/2010	9	437	14	753
9/30/2010	13	441	19	758
10/7/2010	15	443	22	761
10/14/2010	18	446	29	768
10/21/2010	19	447	32	771
10/28/2010	21	449	36	775
11/4/2010	19	447	35	774
11/11/2010	19	447	38	777
11/19/2010	21	449	41	780
11/24/2010	22	450	43	782
12/2/2010	22	450	46	785
12/10/2010	22	450	47	786
12/16/2010	22	450	49	788
12/23/2010	22	450	50	789
12/30/2010	22	450	51	790
1/6/2011	22	450	52	791
1/13/2011	22	450	53	792
1/20/2011	23	451	51	790
1/27/2011	23	451	51	790
2/4/2011	24	452	51	790

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
2/11/2011	24	452	51	790
2/17/2011	25	453	51	790
2/24/2011	25	453	51	790
3/3/2011	26	454	52	791
3/10/2011	26	454	52	791
3/17/2011	21	449	60	799
3/24/2011	24	452	68	807
3/31/2011	33	461	68	807
4/7/2011	34	462	73	812
4/14/2011	35	463	75	814
4/22/2011	36	464	77	816
4/28/2011	42	470	77	816
5/5/2011	49	477	83	822
5/12/2011	59	487	80	819
5/19/2011	67	495	81	820
5/27/2011	73	501	85	824
6/2/2011	78	506	85	824
6/10/2011	84	512	90	829
6/16/2011	87	515	104	843
6/23/2011	95	523	133	872
6/30/2011	119	547	132	871
7/7/2011	132	560	175	914
7/15/2011	144	572	235	974
7/21/2011	6	578	23	997
7/29/2011	15	587	52	1,026
8/4/2011	64	636	28	1,002
8/11/2011	107	679	18	992
8/18/2011	119	691	22	996
8/25/2011	122	694	42	1,016
9/1/2011	122	694	65	1,039
9/8/2011	124	696	82	1,056
9/15/2011	124	696	87	1,061
9/22/2011	124	696	94	1,068
9/30/2011	124	696	95	1,069
10/6/2011	119	691	98	1,072
10/13/2011	119	691	102	1,076
10/21/2011	122	694	105	1,079
10/28/2011	124	696	107	1,081
11/4/2011	126	698	106	1,080
11/11/2011	128	700	103	1,077
11/18/2011	125	697	107	1,081
11/23/2011	122	694	110	1,084
12/1/2011	122	694	109	1,083
12/8/2011	122	694	109	1,083
12/15/2011	124	696	109	1,083
12/22/2011	112	684	119	1,093
12/29/2011	127	699	111	1,085

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
1/5/2012	129	701	110	1,084
1/12/2012	129	701	112	1,086
1/20/2012	132	704	111	1,085
1/27/2012	132	704	113	1,087
2/2/2012	135	707	110	1,084
2/9/2012	132	704	115	1,089
2/16/2012	133	705	115	1,089
2/23/2012	132	704	120	1,094
3/1/2012	132	704	120	1,094
3/8/2012	132	704	118	1,092
3/15/2012	132	704	116	1,090
3/22/2012	133	705	122	1,096
3/29/2012	135	707	124	1,098
4/6/2012	132	704	128	1,102
4/12/2012	132	704	128	1,102
4/19/2012	132	704	128	1,102
4/26/2012	135	707	131	1,105
5/4/2012	136	708	130	1,104
5/11/2012	136	708	132	1,106
5/31/2012	136	708	132	1,106
6/7/2012	136	708	132	1,106
6/15/2012	138	710	134	1,108
6/22/2012	138	710	138	1,112
6/29/2012	140	712	136	1,110
7/9/2012	140	712	146	1,120
7/13/2012	140	712	148	1,122
7/20/2012	141	713	155	1,129
7/26/2012	143	715	155	1,129
8/2/2012	144	716	155	1,129
8/10/2012	144	716	157	1,131
8/16/2012	144	716	162	1,136
8/23/2012	151	723	157	1,131
8/30/2012	151	723	157	1,131
9/6/2012	0	723	1	1,132
9/14/2012	1	724	5	1,136
9/20/2012	4	727	7	1,138
9/27/2012	5	728	9	1,140
10/4/2012	5	728	10	1,141
10/11/2012	5	728	12	1,143
10/19/2012	6	729	15	1,146
10/26/2012	6	729	15	1,146
11/1/2012	7	730	13	1,144
11/8/2012	7	730	17	1,148
11/21/2012	7	730	19	1,150
11/29/2012	47	770	26	1,157
12/6/2012	78	801	32	1,163
12/13/2012	89	812	36	1,167

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
12/20/2012	108	831	37	1,168
12/27/2012	119	842	32	1,163
1/3/2013	122	845	38	1,169
1/9/2013	135	858	36	1,167
1/16/2013	148	871	39	1,170
1/24/2013	151	874	46	1,177
2/4/2013	164	887	47	1,178
2/8/2013	177	900	44	1,175
2/14/2013	184	907	44	1,175
2/21/2013	184	907	47	1,178
2/28/2013	197	920	48	1,179
3/8/2013	201	924	44	1,175
3/15/2013	207	930	51	1,182
3/22/2013	214	937	51	1,182
3/28/2013	221	944	51	1,182
4/4/2013	224	947	51	1,182
4/12/2013	224	947	62	1,193
4/19/2013	252	975	68	1,199
4/26/2013	289	1,012	51	1,182
5/3/2013	301	1,024	52	1,183
5/9/2013	301	1,024	54	1,185
5/16/2013	7	1,031	1	1,186
5/24/2013	12	1,036	9	1,194
5/30/2013	21	1,045	7	1,192
6/7/2013	28	1,052	9	1,194
6/13/2013	38	1,052	40	1,225
6/21/2013	62	1,086	54	1,239
6/28/2013	87	1,111	66	1,251
7/5/2013	122	1,146	66	1,251
7/12/2013	132	1,156	82	1,267
7/18/2013	146	1,170	102	1,287
7/25/2013	149	1,173	140	1,325
8/2/2013	156	1,180	151	1,336
8/9/2013	163	1,187	152	1,337
8/16/2013	167	1,191	154	1,339
8/23/2013	174	1,198	154	1,339
8/30/2013	187	1,211	152	1,337
9/6/2013	184	1,208	163	1,348
9/12/2013	1	1,209	2	1,350
9/19/2013	3	1,211	3	1,351
9/27/2013	5	1,213	7	1,355
10/4/2013	6	1,214	15	1,363
10/11/2013	7	1,215	16	1,364
10/18/2013	7	1,215	13	1,361
10/25/2013	8	1,216	13	1,361
11/1/2013	9	1,217	13	1,361
11/8/2013	10	1,218	12	1,360

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
11/15/2013	10	1,218	12	1,360
11/22/2013	11	1,219	12	1,360
11/27/2013	12	1,220	13	1,361
12/4/2013	12	1,220	13	1,361
12/13/2013	10	1,218	15	1,363
12/19/2013	10	1,218	14	1,362
12/27/2013	12	1,220	17	1,365
1/10/2014	12	1,220	18	1,366
1/17/2014	12	1,220	17	1,365
1/31/2014	12	1,220	18	1,366
2/12/2014	13	1,221	19	1,367
2/28/2014	15	1,223	21	1,369
3/7/2014	18	1,226	20	1,368
3/14/2014	29	1,237	44	1,392
3/21/2014	75	1,283	14	1,362
3/28/2014	78	1,286	20	1,368
4/4/2014	135	1,343	23	1,371
4/11/2014	207	1,415	20	1,368
4/18/2014	245	1,453	31	1,379
4/25/2014	259	1,467	14	1,362
4/30/2014	269	1,477	24	1,372
5/8/2014	269	1,477	31	1,379
5/16/2014	272	1,480	38	1,386
5/23/2014	320	1,528	33	1,381
5/30/2014	385	1,593	34	1,382
6/6/2014	5	1,598	0	1,382
6/13/2014	10	1,603	0	1,382
6/23/2014	7	1,600	3	1,385
6/27/2014	5	1,598	5	1,387
7/7/2014	13	1,606	3	1,385
7/11/2014	17	1,610	4	1,386
7/18/2014	17	1,610	8	1,390
7/23/2014	23	1,616	4	1,386
8/1/2014	23	1,616	6	1,388
8/8/2014	23	1,616	6	1,388
8/15/2014	26	1,619	6	1,388
8/22/2014	49	1,642	13	1,395
8/29/2014	59	1,652	11	1,393
9/4/2014	64	1,657	11	1,393
9/12/2014	67	1,660	11	1,393
9/19/2014	70	1,663	8	1,390
9/26/2014	78	1,671	9	1,391
10/3/2014	78	1,671	14	1,396
10/9/2014	84	1,677	15	1,397
10/16/2014	89	1,682	15	1,397
10/23/2014	119	1,712	12	1,394
10/31/2014	138	1,731	19	1,401

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
11/6/2014	132	1,725	19	1,401
11/17/2014	138	1,731	23	1,405
11/21/2014	157	1,750	23	1,405
11/26/2014	167	1,760	17	1,399
12/2/2014	177	1,770	17	1,399
12/9/2014	180	1,773	20	1,402
12/16/2014	194	1,787	17	1,399
12/23/2014	201	1,794	17	1,399
12/26/2014	207	1,800	14	1,396
1/2/2015	211	1,804	17	1,399
1/9/2015	228	1,821	.24	1,406
1/16/2015	211	1,804	17	1,399
1/23/2015	228	1,821	17	1,399
1/30/2015	221	1,814	17	1,399
2/6/2015	231	1,824	17	1,399
2/13/2015	235	1,828	17	1,399
2/20/2015	238	1,831	17	1,399
2/27/2015	245	1,838	17	1,399
3/6/2015	248	1,841	17	1,399
3/13/2015	252	1,845	17	1,399
3/20/2015	255	1,848	17	1,399
3/27/2015	259	1,852	17	1,399
4/3/2015	259	1,852	17	1,399
4/10/2015	262	1,855	17	1,399
4/17/2015	265	1,858	21	1,403
4/24/2015	265	1,858	24	1,406
5/1/2015	272	1,865	21	1,403
5/8/2015	276	1,869	21	1,403
5/15/2015	279	1,872	24	1,406
5/22/2015	276	1,869	31	1,413
5/29/2015	293	1,886	27	1,409
6/4/2015	293	1,886	27	1,409
6/11/2015	296	1,889	27	1,409
6/18/2015	300	1,893	27	1,409
6/25/2015	300	1,893	27	1,409
7/2/2015	306	1,899	26	1,408
7/9/2015	313	1,906	27	1,409
7/16/2015	1	1,907	0	1,409
7/23/2015	5	1,911	3	1,412
7/30/2015	7	1,913	3	1,412
8/6/2015	13	1,919	3	1,412
8/13/2015	13	1,919	3	1,412
8/20/2015	54	1,960	5	1,414
8/27/2015	151	2,057	3	1,412
9/3/2015	157	2,063	7	1,416
9/10/2015	217	2,123	7	1,416
9/17/2015	221	2,127	7	1,416

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
9/24/2015	238	2,144	7	1,416
10/1/2015	323	2,229	10	1,419
10/8/2015	419	2,325	6	1,415
10/15/2015	0	2,325	2	1,417
10/22/2015	9	2,334	2	1,417
10/29/2015	13	2,338	5	1,420
11/5/2015	21	2,346	4	1,419
11/12/2015	23	2,348	2	1,417
11/19/2015	23	2,348	2	1,417
11/25/2015	26	2,351	2	1,417
12/2/2015	29	2,354	4	1,419
12/3/2015	29	2,354	4	1,419
12/10/2015	31	2,356	4	1,419
12/17/2015	35	2,360	5	1,420
12/30/2015	41	2,366	2	1,417
1/6/2016	44	2,369	5	1,420
1/13/2016	52	2,377	3	1,418
1/20/2016	52	2,377	5	1,420
1/21/2016	52	2,377	5	1,420
1/28/2016	59	2,384	4	1,419
2/4/2016	70	2,395	3	1,418
2/11/2016	78	2,403	3	1,418
2/18/2016	81	2,406	3	1,418
2/25/2016	84	2,409	3	1,418
3/3/2016	84	2,409	6	1,421
3/10/2016	87	2,412	3	1,418
3/14/2016	87	2,412	3	1,418
3/18/2016	92	2,417	3	1,418
3/25/2016	92	2,417	3	1,418
4/1/2016	95	2,420	3	1,418
4/8/2016	98	2,423	6	1,421
4/15/2016	104	2,429	3	1,418
4/22/2016	104	2,429	3	1,418
4/29/2016	104	2,429	3	1,418
5/6/2016	104	2,429	3	1,418
5/13/2016	141	2,466	3	1,418
5/20/2016	141	2,466	3	1,418
5/27/2016	151	2,476	3	1,418
6/3/2016	151	2,476	3	1,418
6/10/2016	151	2,476	3	1,418
6/16/2016	151	2,476	3	1,418
6/23/2016	151	2,476	3	1,418
6/30/2016	157	2,482	3	1,418
7/7/2016	157	2,482	3	1,418
7/14/2016	157	2,482	3	1,418
7/21/2016	157	2,482	3	1,418
7/28/2016	157	2,482	3	1,418
8/2/2016	157	2,482	3	1,418
8/5/2016	157	2,482	3	1,418
8/12/2016	157	2,482	3	1,418
8/19/2016	157	2,482	3	1,418
8/26/2016	157	2,482	3	1,418
9/2/2016	157	2,482	3	1,418

Table 3
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Cumulative Total Ancillary Groundwater Removed from the Subsurface (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cumulative Total Diesel Fuel Product Removed from the Subsurface (gallons)
9/9/2016	157	2,482	3	1,418
9/16/2016	157	2,482	3	1,418
9/30/2016	157	2,482	3	1,418
10/7/2016	157	2,482	3	1,418
10/14/2016	157	2,482	3	1,418
10/21/2016	157	2,482	3	1,418
10/28/2016	157	2,482	3	1,418
11/4/2016	157	2,482	3	1,418
11/11/2016	157	2,482	3	1,418
11/18/2016	190	2,515	7	1,422
11/25/2016	190	2,515	7	1,422
12/2/2016	187	2,512	10	1,425
12/9/2016	187	2,512	10	1,425
12/16/2016	187	2,512	10	1,425
12/22/2016	187	2,512	10	1,425
12/29/2016	187	2,512	10	1,425
1/5/2017	187	2,512	10	1,425
1/11/2017	187	2,512	13	1,428
1/19/2017	187	2,512	13	1,428
1/26/2017	187	2,512	10	1,425
2/9/2017	187	2,512	13	1,428
2/16/2017	193	2,518	10	1,425
2/23/2017	190	2,515	13	1,428
3/2/2017	190	2,515	13	1,428
3/9/2017	190	2,515	13	1,428
3/16/2017	190	2,515	13	1,428
3/23/2017	190	2,515	17	1,432
3/30/2017	200	2,525	10	1,425

the nearest 0.25 inch. The quantity of water is estimated using water-finding paste applied to the lower portion of the dipstick. Dipstick measurements are converted to gallons using a tank chart.

Note 2: *Tank emptied on August 6, 2009, June 17, 2010, September 10, 2010, July 15, 2011, August 30, 2012, May 9, 2013, September 6, 2013, May 31, 2014, July 9, 2015, and October 8, 2015.

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
3/16/2009	0.00	0.25	2.00	1.00
4/2/2009	0.00	0.19	1.75	0.01
5/7/2009	0.00	0.50	1.75	0.20
5/21/2009	0.00	0.50	1.50	0.25
5/28/2009	0.00	0.13	0.13	0.25
6/4/2009	0.005	0.13	0.38	0.13
6/11/2009	Not Measured	0.13	0.25	0.13
6/18/2009	0.005	0.13	0.38	0.005
6/25/2009	0.005	0.13	0.38	0.005
7/2/2009	0.005	0.13	0.25	0.005
7/9/2009	0.005	0.13	0.25	0.005
7/16/2009	0.005	0.13	0.25	0.13
7/23/2009	0.005	0.13	0.25	0.13
7/30/2009	0.005	0.25	0.375	0.005
8/6/2009	0.005	0.375	0.375	0.005
8/13/2009	0.005	0.5	4.5	0.5
8/20/2009	0.005	0.5	0.75	0.5
8/27/2009	0.005	0.25	0.375	0.25
9/3/2009	0.005	0.25	0.375	0.25
9/10/2009	0.005	0.25	2.75	0.25
9/17/2009	0.005	0.25	5.0	5.5
9/24/2009	0.005	0.25	5.0	5.0
10/2/2009	0.005	0.25	5.0	7.0
10/8/2009	0.005	0.25	6.0	7.5
10/15/2009	0.005	0.9	8.0	9.8
10/22/2009	0.005	0.125	0.8	2.0
10/29/2009	0.19	0.125	0.005	0.5
11/5/2009	0.005	0.125	0.25	0.005
11/12/2009	0.005	0.125	0.25	0.125
11/19/2009	0.005	0.125	0.25	0.125
11/25/2009	0.005	0.125	0.375	0.25
12/3/2009	0.005	0.125	0.5	0.375
12/11/2009	0.005	0.5	0.5	0.125
12/18/2009	0.005	0.38	0.5	0.125
12/24/2009	0.005	0.125	0.5	0.25
12/31/2009	0.005	0.005	0.25	0.125
1/7/2010	0.005	—	—	0.188
1/15/2010	0.005	0.125	0.75	0.25
1/22/2010	0.005	0.25	1.0	0.375
1/27/2010	0.005	0.125	0.75	0.375
2/4/2010	0.005	0.25	1.0	0.375
2/12/2010	0.50	0.375	0.75	0.375
2/18/2010	0.005	0.125	0.125	0.005
2/25/2010	0.005	0.125	0.125	0.005
3/5/2010	0.125	0.25	0.625	0.125
3/12/2010	0.005	0.25	0.25	0.005
3/19/2010	0.005	0.5	2.0	0.005
3/26/2010	0.005	0.25	1.0	0.005
4/1/2010	0.005	0.38	1.0	0.005
4/8/2010	0.125	0.375	0.25	0.005

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
4/16/2010	0.005	0.125	0.25	0.005
4/22/2010	0.005	0.25	1.0	0.0125
4/30/2010	0.005	0.13	0.25	0.005
5/7/2010	0.005	0.25	0.625	0.125
5/14/2010	0.125	0.25	0.375	0.125
5/21/2010	0.005	0.13	0.25	0.005
5/28/2010	0.005	0.125	0.75	0.125
6/4/2010	0.005	0.125	0.50	0.125
6/10/2010	0.005	0.125	0.25	0.125
6/17/2010	0.005	0.125	0.25	0.125
6/24/2010	0.005	0.25	0.25	0.125
7/1/2010	0.005	0.125	0.50	0.125
7/8/2010	0.005	0.125	0.25	1.25
7/14/2010	0.005	0.125	0.50	4.25
7/22/2010	0.005	0.005	0.25	1.50
7/29/2010	0.005	0.005	0.75	1.50
8/6/2010	0.005	0.005	0.25	4.00
8/12/2010	0.005	0.005	0.50	3.75
8/19/2010	0.005	0.125	0.25	2.50
8/26/2010	0.005	0.005	0.25	0.13
9/3/2010	0.005	0.005	0.25	0.50
9/10/2010	0.005	0.005	0.005	0.13
9/16/2010	0.005	0.005	0.13	0.13
9/24/2010	0.005	0.005	0.25	0.005
9/30/2010	0.005	0.005	0.50	0.125
10/7/2010	0.005	0.005	0.375	0.125
10/14/2010	0.005	0.005	0.625	0.005
10/21/2010	0.005	0.005	0.500	0.063
10/28/2010	0.005	0.005	1.0	0.25
11/4/2010	0.005	0.005	0.75	0.125
11/11/2010	0.005	0.005	0.50	0.125
11/19/2010	0.005	0.005	0.25	0.125
11/24/2010	0.005	0.125	0.75	0.25
12/2/2010	0.005	0.125	0.5	0.25
12/10/2010	0.005	0.005	0.25	0.125
12/16/2010	0.005	0.125	0.125	0.005
12/23/2010	0.005	0.125	0.25	0.125
12/30/2010	0.005	0.005	0.25	0.125
1/6/2011	0.005	0.005	0.75	0.25
1/13/2011	0.005	0.005	0.5	0.125
1/20/2011	0.005	0.125	0.625	0.375
1/27/2011	0.005	0.125	1.0	0.75
2/4/2011	0.005	0.005	0.5	0.25
2/17/2011	0.005	0.125	1.0	0.375
2/24/2011	0.125	0.005	0.5	0.25
3/3/2011	0.005	0.25	0.75	0.5
3/10/2011	0.005	0.005	0.5	0.4
3/17/2011	0.01	0.005	0.9	0.25
3/24/2011	0.005	0.005	0.75	0.125
3/31/2011	0.125	0.005	0.5	1.0

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
4/7/2011	0.005	0.125	0.6	0.375
4/14/2011	0.005	0.005	0.75	0.25
4/22/2011	0.005	0.005	1.0	0.5
4/28/2011	0.005	0.125	0.5	0.25
5/5/2011	0.005	0.005	0.25	1.5
5/12/2011	0.005	0.005	0.25	0.75
5/19/2011	0.005	0.125	0.5	1.0
5/27/2011	0.005	0.005	0.75	1.5
6/2/2011	0.005	0.125	0.5	1.5
6/10/2011	0.005	0.125	0.5	2.0
6/16/2011	0.005	0.125	1.0	3.0
6/23/2011	0.005	0.005	1.0	2.5
6/30/2011	0.005	0.25	1.5	3.0
7/7/2011	0.005	0.125	1.0	2.5
7/15/2011	0.005	0.005	0.75	2.0
7/21/2011	0.005	0.005	0.75	1.5
7/29/2011	0.005	0.25	1.0	3.0
8/4/2011	0.005	0.125	4.0	5.0
8/11/2011	0.005	0.005	1.0	10.5
8/18/2011	0.005	0.005	1.0	0.25
8/25/2011	0.005	Not Measured	1.0	0.375
9/1/2011	0.005	Not Measured	0.75	0.375
9/8/2011	0.005	Not Measured	0.25	0.25
9/15/2011	0.005	Not Measured	0.5	0.75
9/22/2011	0.005	Not Measured	1.0	1.25
9/30/2011	0.005	0.125	0.25	0.375
10/6/2011	0.005	0.005	0.375	0.375
10/13/2011	0.005	0.005	0.375	0.50
10/21/2011	0.005	0.005	0.50	0.25
10/28/2011	0.005	0.125	0.25	0.005
11/4/2011	0.005	0.005	0.375	0.125
11/11/2011	0.005	0.005	0.250	0.250
11/18/2011	0.005	0.005	0.250	0.125
11/23/2011	0.005	0.005	0.75	0.50
12/1/2011	0.005	0.125	0.50	0.25
12/8/2011	0.005	0.005	0.375	0.125
12/15/2011	0.005	0.005	0.375	0.125
12/22/2011	0.005	0.005	0.5	0.25
12/29/2011	0.005	0.125	1.0	0.375
1/5/2012	0.005	0.005	0.75	0.25
1/12/2012	0.005	0.125	0.50	0.25
1/20/2012	0.005	0.125	0.75	0.50
1/27/2012	0.005	0.005	0.50	0.25
2/2/2012	0.005	0.125	0.625	0.005
2/9/2012	0.005	0.005	0.50	0.125
2/16/2012	0.005	0.005	0.25	0.125
2/23/2012	0.005	0.005	0.375	0.005
3/1/2012	0.005	0.25	1.25	0.625
3/8/2012	0.005	0.25	1.25	0.625
3/15/2012	0.005	0.005	2.5	0.5

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
3/22/2012	0.005	0.005	0.25	0.125
3/29/2012	0.005	0.005	0.13	0.125
4/6/2012	0.005	0.005	0.750	0.375
4/12/2012	0.005	0.005	0.625	0.125
4/19/2012	0.005	0.005	0.50	0.005
4/26/2012	0.005	0.005	0.50	0.005
5/4/2012	0.005	0.125	0.625	0.25
5/11/2012	0.005	0.125	0.750	0.25
5/31/2012	0.125	0.25	0.75	0.50
6/7/2012	0.125	0.25	1.00	0.50
6/15/2012	0.005	0.005	0.625	0.375
6/22/2012	0.005	0.125	0.375	0.25
6/29/2012	0.005	0.125	0.75	1.0
7/9/2012	0.005	0.005	0.25	0.5
7/13/2012	0.005	0.005	0.125	0.25
7/20/2012	0.005	0.005	0.125	0.25
7/26/2012	0.005	0.005	0.125	0.005
8/2/2012	0.005	0.005	0.25	0.125
8/10/2012	0.005	0.005	0.75	0.375
8/16/2012	0.005	0.125	0.50	0.25
8/23/2012	0.005	0.060	0.25	0.25
8/30/2012	0.005	N/A	0.25	0.375
9/6/2012	0.005	0.005	0.50	0.25
9/14/2012	0.005	0.005	0.25	0.25
9/20/2012	0.005	0.125	0.50	0.25
9/27/2012	0.005	0.125	0.375	0.25
10/4/2012	0.005	0.005	0.50	0.25
10/11/2012	0.005	0.25	1.50	1.00
10/19/2012	0.005	0.005	0.50	0.25
10/26/2012	0.005	0.005	0.25	0.25
11/1/2012	0.005	0.005	1.50	0.25
11/8/2012	0.005	0.005	1.00	0.50
11/21/2012	0.005	0.005	0.50	0.25
11/29/2012	0.005	0.005	0.50	0.25
12/6/2012	0.005	0.005	0.50	0.13
12/13/2012	0.005	0.005	0.50	0.25
12/20/2012	0.005	0.005	0.50	0.25
12/27/2012	0.005	0.005	0.50	0.25
1/3/2013	0.005	0.005	1.00	0.005
1/9/2013	0.005	0.005	1.00	0.005
1/16/2013	0.005	0.005	0.5	0.005
1/24/2013	0.005	0.005	0.5	0.005
2/4/2013	0.005	0.005	0.005	0.005
2/8/2013	0.005	0.005	0.06	0.005
2/14/2013	0.005	0.005	0.06	0.005
2/21/2013	0.00	0.00	0.25	0.25
2/28/2013	0.00	0.00	0.75	0.25
3/8/2013	0.00	0.00	0.75	0.00
3/15/2013	0.00	0.00	0.13	0.13
3/22/2013	0.00	0.00	0.00	0.00

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ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
3/28/2013	0.00	0.00	0.13	0.00
4/4/2013	0.00	0.00	0.13	0.13
4/12/2013	0.00	0.00	0.00	0.13
4/19/2013	0.00	0.00	0.00	0.00
4/26/2013	0.00	0.00	0.00	0.00
5/3/2013	0.00	0.00	0.00	0.00
5/9/2013	0.06	0.00	0.00	0.00
5/16/2013	0.13	Sheen	0.125	Sheen
5/24/2013	Sheen	Sheen	0.375	Sheen
5/30/2013	Sheen	Sheen	0.125	0.125
6/7/2013	Sheen	0.125	Sheen	Sheen
6/13/2013	0.13	0.125	Sheen	Sheen
6/21/2013	0.00	Sheen	Sheen	0.125
6/28/2013	Sheen	Sheen	0.00	Sheen
7/5/2013	Sheen	0.125	0.125	0.00
7/11/2013	Sheen	Sheen	0.125	Sheen
7/18/2013	Sheen	0.125	0.375	0.25
7/25/2013	Sheen	0.125	0.125	Sheen
8/2/2013	Sheen	Sheen	0.125	0.125
8/9/2013	Sheen	Sheen	0.375	0.125
8/16/2013	Sheen	Sheen	0.250	0.125
8/23/2013	Sheen	Sheen	1.0	0.25
8/30/2013	Sheen	Sheen	0.5	0.125
9/6/2013	Sheen	Sheen	0.625	0.125
9/12/2013	Sheen	Sheen	0.125	1.0
9/19/2013	Sheen	Sheen	0.25	1.0
9/27/2013	0.125	Sheen	0.5	2.5
10/4/2013	0.125	Sheen	0.375	1.0
10/11/2013	Sheen	Sheen	0.125	0.75
10/18/2013	0.125	Sheen	0.50	0.50
10/25/2013	Sheen	Sheen	0.25	Sheen
11/1/2013	Sheen	Sheen	0.25	Sheen
11/8/2013	Sheen	Sheen	0.125	Sheen
11/15/2013	Sheen	Sheen	0.125	Sheen
11/22/2013	Sheen	Sheen	Sheen	Sheen
11/27/2013	Sheen	Sheen	0.125	Sheen
12/4/2013	Sheen	Sheen	Sheen	Sheen
12/13/2013	Sheen	Sheen	0.125	Sheen
12/19/2013	Sheen	Sheen	0.125	Sheen
12/27/2013	Sheen	Sheen	0.125	0.25
1/10/2014	Sheen	Sheen	Sheen	0.125
1/17/2014	Sheen	Sheen	0.125	Sheen
1/31/2014	Sheen	Sheen	Sheen	Sheen
2/12/2014	Unable to Check	Unable to Check	Unable to Check	Unable to Check
2/28/2014	Sheen	Sheen	0.25	Sheen
3/7/2014	Sheen	Sheen	0.125	Sheen
3/14/2014	Sheen	0.25	0.125	Sheen
3/21/2014	Sheen	Sheen	0.25	0.125
3/28/2014	Sheen	Sheen	0.25	1.0
4/4/2014	Sheen	Sheen	Sheen	Sheen

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Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
4/11/2014	Sheen	Sheen	Sheen	0.25
4/18/2014	Sheen	Sheen	Sheen	1.0
4/25/2014	Sheen	Sheen	1.0	2.0
4/30/2014	Sheen	Sheen	0.5	1.0
5/8/2014	Sheen	Sheen	1.0	0.07
5/16/2014	Sheen	Sheen	0.06	Sheen
5/23/2014	Sheen	Sheen	Sheen	Sheen
5/30/2014	Sheen	Sheen	Sheen	Sheen
6/6/2014	Sheen	Sheen	Sheen	Sheen
6/13/2014	Sheen	Sheen	0.5	Sheen
6/23/2014	Sheen	Sheen	0.75	Sheen
6/27/2014	Sheen	Sheen	0.25	Sheen
7/7/2014	Sheen	Sheen	0.063	Sheen
7/11/2014	Sheen	Sheen	1.0	Sheen
7/18/2014	Sheen	Sheen	0.5	Sheen
7/23/2014	0.0	0.0	6.0	0.0
8/1/2014	0.0	0.0	1.0	0.0
8/8/2014	0.0	0.0	1.0	0.13
8/15/2014	Sheen	Sheen	0.25	0.25
8/22/2014	Sheen	Sheen	Sheen	Sheen
8/29/2014	0.0	0.0	0.0	0.0
9/4/2014	0.0	0.0	0.0	0.0
9/12/2014	0.0	0.0	0.0	0.0
9/19/2014	0.1	0.1	0.5	0.0
9/26/2014	0.0	0.0	0.5	0.0
10/3/2014	0.0	0.0	0.25	0.0
10/9/2014	0.0	0.1	0.5	0.5
10/16/2014	0.0	0.0	0.5	1.0
10/23/2014	0.0	0.0	0.75	0.25
10/31/2014	0.0	0.0	1.0	0.25
11/6/2014	0.0	0.0	1.0	0.25
11/17/2014	0.0	0.0	0.5	0.1
11/21/2014	0.0	0.0	0.1	0.25
11/26/2014	0.0	0.0	0.1	0.1
12/2/2014	0.0	0.0	0.25	0.1
12/9/2014	0.0	0.0	0.1	0.1
12/16/2014	0.0	0.0	0.25	0.25
12/23/2014	0.0	0.0	0.25	0.25
12/26/2014	0.0	0.0	1.0	1.0
1/2/2015	0.0	0.0	1.00	0.25
1/9/2015	0.0	0.0	0.25	0.1
1/16/2015	0.0	0.0	0.25	0.1
1/23/2015	0.0	0.0	0.75	0.1
1/30/2015	0.0	0.0	1.0	0.25
2/6/2015	0.0	0.0	1.0	0.25
2/13/2015	0.0	0.0	1.25	0.5
2/20/2015	0.0	0.0	0.5	0.25
2/27/2015	0.0	0.0	0.5	0.25
3/6/2015	0.0	0.0	0.75	0.25
3/13/2015	0.0	0.0	0.75	0.1

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
3/20/2015	0.0	0.0	1.75	2.50
3/27/2015	0.0	0.0	2.50	3.50
4/3/2015	0.0	0.0	2.50	4.00
4/10/2015	0.0	0.0	2.00	4.00
4/17/2015	0.0	0.0	1.00	0.10
4/24/2015	0.0	0.0	0.00	0.25
5/1/2015	0.0	0.0	0.00	0.50
5/8/2015	0.0	0.0	0.50	0.25
5/15/2015	0.0	0.0	0.25	1.00
5/22/2015	0.0	0.0	0.40	0.40
5/29/2015	0.0	0.0	0.19	0.15
6/4/2015	0.0	0.0	0.50	0.50
6/11/2015	0.0	0.0	1.00	0.25
6/18/2015	0.0	0.0	1.00	0.50
6/25/2015	0.0	0.0	0.40	0.05
7/2/2015	0.0	0.0	0.25	0.00
7/9/2015	0.0	0.0	0.50	0.25
7/16/2015	0.0	0.0	1.75	0.25
7/23/2015	0.0	0.0	0.50	0.25
7/30/2015	0.0	0.0	1.00	0.10
8/6/2015	0.0	0.0	1.50	2.50
8/13/2015	0.0	0.0	0.25	2.25
8/20/2015	0.0	0.0	Sheen	Sheen
8/27/2015	0.0	0.0	0.25	Sheen
9/3/2015	0.0	0.0	0.25	Sheen
9/10/2015	0.0	0.0	0.00	0.00
9/17/2015	0.0	0.0	0.75	Sheen
9/24/2015	0.0	0.0	0.00	0.00
10/1/2015	0.0	0.0	Sheen	0.00
10/8/2015	0.0	0.0	0.00	0.00
10/15/2015	0.0	0.0	Sheen	Sheen
10/22/2015	0.0	0.0	0.00	0.00
10/29/2015	0.0	0.0	Sheen	0.50
11/5/2015	0.0	0.0	0.00	0.25
11/12/2015	0.0	0.0	0.00	Sheen
11/19/2015	0.0	0.0	0.00	Sheen
11/25/2015	0.0	0.0	0.00	Sheen
12/2/2015	0.0	0.0	0.00	Sheen
12/3/2015	0.0	0.0	0.00	Sheen
12/10/2015	0.0	0.0	0.00	Sheen
12/17/2015	0.0	0.0	0.00	Sheen
12/30/2015	0.0	0.0	0.00	0.00
1/6/2016	0.0	0.0	0.00	0.00
1/13/2016	0.0	0.0	0.00	0.00
1/20/2016	0.0	0.0	0.00	0.00
1/21/2016	0.0	0.0	0.00	0.00
1/28/2016	0.0	0.0	0.00	0.00
2/4/2016	0.0	0.0	0.00	0.00
2/11/2016	0.0	0.0	0.00	0.00
2/18/2016	0.0	0.0	Sheen	Sheen

Table 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4
2/25/2016	0.0	0.0	Sheen	Sheen
3/3/2016	0.0	0.0	Sheen	Sheen
3/10/2016	0.0	0.0	Sheen	Sheen
3/14/2016	0.0	0.0	Sheen	Sheen
3/18/2016	0.0	0.0	Sheen	Sheen
3/25/2016	0.0	0.0	Sheen	0.50
4/1/2016	0.0	0.0	Sheen	0.25
4/8/2016	0.0	0.0	Sheen	0.25
4/15/2016	0.0	0.0	Sheen	0.13
4/22/2016	0.0	0.0	Sheen	0.13
4/29/2016	0.0	0.0	Sheen	0.25
5/6/2016	0.0	0.0	Sheen	0.25
5/13/2016	0.0	0.0	Sheen	0.13
5/20/2016	0.0	0.0	Sheen	0.13
5/27/2016	0.0	0.0	Sheen	0.13
6/3/2016	0.0	0.0	Sheen	0.13
* 6/10/2016	0.0	0.0	0.00	0.00
6/16/2016	0.0	0.0	0.00	0.00
6/23/2016	0.0	0.0	0.00	0.00
6/30/2016	0.0	0.0	0.00	0.00
7/7/2016	0.0	0.0	0.00	0.00
7/14/2016	0.0	0.0	0.00	0.00
7/21/2016	0.0	0.0	0.00	0.00
7/28/2016	0.0	0.0	0.00	0.00
8/2/2016	0.0	0.0	0.00	0.00
8/5/2016	0.0	0.0	0.00	0.00
8/12/2016	0.0	0.0	0.00	0.00
8/19/2016	0.0	0.0	0.00	0.00
8/26/2016	0.0	0.0	0.00	0.00
9/2/2016	0.0	0.0	0.00	0.00
9/9/2016	0.0	0.0	0.00	0.00
9/16/2016	0.0	0.0	0.00	0.00
9/30/2016	0.0	0.0	0.00	0.00
10/7/2016	0.0	0.0	0.00	0.00
10/14/2016	0.0	0.0	0.00	0.00
10/21/2016	0.0	0.0	0.00	0.00
10/28/2016	0.0	0.0	0.00	0.00
11/4/2016	0.0	0.0	0.00	0.00
11/11/2016	0.0	0.0	0.00	0.00
11/18/2016	0.0	0.0	0.00	0.00
11/25/2016	0.0	0.0	0.00	0.00
12/2/2016	0.0	0.0	0.00	0.00
12/9/2016	0.0	0.0	0.00	0.00
12/16/2016	0.0	0.0	0.00	0.00
12/22/2016	0.0	0.0	0.00	0.00
12/29/2016	0.0	0.0	0.00	0.00

Notes: Free product checked by lowering a bottom-filling baller into the water table surface, retrieving it, and measuring with a tape measure. In 1Q2013 and earlier, "0.005 inches" indicates that only a sheen was present.

* Passive recovery began in lieu of pumping operations on June 10, 2016

TABLE 5
Groundwater Analytical Data
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Parameters	Units	Groundwater Screening Levels		Sampling Date	Well and Sample ID								DUP-1 [F-4]	
		RISC Industrial	RCG Industrial Vapor Intrusion ^a		RW-1	RW-2	RW-3	RW-4	FP-1	FP-4	FP-5	FP-6	Field Blank	
		1SE1058-07 ^b	1SE1058-03 ^b	1SE1058-05 ^b	1SE1058-01 ^b									
		16K1374-03 ^b	16K1374-02 ^b	16K1374-03 ^b	16K1374-06 ^b	16K1374-05 ^b	16K1374-07 ^b	16K1374-08 ^b	16K1374-9 ^b	16K1374-6 ^b	16K1374-7 ^b			
BTEX														
Benzene	ug/L	52	120	5/22/2015	<5.0	<5.0	<5.0	8.8	<5.0	—	—	—	—	—
				11/18/2016	<5.0	<5.0	<5.0	<5.0	<5.0	210	200	110	<5.0	210
Ethylbenzene	ug/L	10,000	—	5/22/2015	<5.0	<5.0	39	49	130	—	—	—	—	—
				11/18/2016	5.4	5.9	24	16	84	500	530	480	<5.0	530
m,p-Xylene	ug/L	---	---	5/22/2015	<5.0	<5.0	55	95	260	—	—	—	—	—
				11/18/2016	<5.0	<5.0	41	36	250	950	960	1400	<5.0	940
Methyl-t-Butyl Ether	ug/L	0.72	—	5/22/2015	—	—	—	—	—	—	—	—	—	—
				11/18/2016	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene	ug/L	—	---	5/22/2015	<5.0	150	57	24	—	—	—	—	—	—
				11/18/2016	<5.0	<5.0	89	36	31	<5.0	25	320	<5.0	25
Toluene	ug/L	8,200	—	5/22/2015	<5.0	<5.0	<5.0	<5.0	<5.0	—	—	—	—	—
				11/18/2016	<5.0	<5.0	<5.0	<5.0	<5.0	12	95	<5.0	12	—
Total Xylenes	ug/L	20,000	—	5/22/2015	<5.0	<5.0	210	150	280	—	—	—	—	—
				11/18/2016	<5.0	<5.0	130	72	290	960	980	1700	<5.0	960
PAHs														
Acenaphthene	ug/L	6,100	—	5/22/2015	1.4	<0.52	2.0	3.2	3.4	—	—	—	—	—
				11/18/2016	1.2	0.48	1.7	2.1	3.6	8.5	2.4	5.7	<0.26	5
Acenaphthylene	ug/L	730	—	5/22/2015	<0.51	<0.52	<0.52	0.64	0.53	—	—	—	—	—
				11/18/2016	<0.25	<0.26	<0.25	0.42	0.51	1.9	1.3	1.0	<0.26	1.2
Anthracene	ug/L	31,000	—	5/22/2015	<0.51	<0.52	<0.52	0.84	0.79	—	—	—	—	—
				11/18/2016	<0.25	<0.26	<0.25	1	1.3	5	3.3	<0.26	<0.26	1.3
Benz[a]anthracene	ug/L	3.9	---	5/22/2015	<0.10	<0.10	<0.10	<0.10	<0.10	—	—	—	—	—
				11/18/2016	<0.051	<0.051	0.09	0.061	0.077	0.11	<0.051	<0.051	<0.053	0.057
Benzo[a]pyrene	ug/L	0.39	—	5/22/2015	<0.10	<0.10	<0.10	<0.10	<0.10	—	—	—	—	—
				11/18/2016	<0.051	<0.051	<0.05	<0.051	<0.052	<0.052	<0.052	<0.051	<0.053	<0.052
Benzo[b]fluoranthene	ug/L	3.9	—	5/22/2015	<0.10	<0.10	<0.10	<0.10	<0.10	—	—	—	—	—
				11/18/2016	3.4	<0.051	0.055	<0.051	0.067	<0.052	<0.051	<0.051	<0.053	<0.052
Benzol[g,h,i]perylene	ug/L	—	—	5/22/2015	<0.20	<0.21	<0.21	<0.21	<0.21	—	—	—	—	—
				11/18/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.11	<0.1
Benzo[k]fluoranthene	ug/L	39	---	5/22/2015	<0.10	<0.10	<0.10	<0.10	<0.10	—	—	—	—	—
				11/18/2016	<0.051	<0.051	<0.05	<0.051	<0.052	<0.052	<0.051	<0.051	<0.053	<0.052
Chrysene	ug/L	390	—	5/22/2015	<0.51	<0.52	<0.52	<0.52	<0.52	—	—	—	—	—
				11/18/2016	<0.25	<0.26	<0.25	<0.25	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Dibenz[a,h]anthracene	ug/L	0.39	—	5/22/2015	<0.10	<0.10	<0.10	<0.10	<0.10	—	—	—	—	—
				11/18/2016	<0.051	<0.051	<0.05	<0.051	<0.052	<0.052	<0.051	<0.051	<0.053	<0.052
Fluoranthene	ug/L	4,100	—	5/22/2015	<0.51	<0.52	<0.52	<0.52	<0.52	—	—	—	—	—
				11/18/2016	<0.25	<0.26	0.71	0.48	0.41	0.78	0.48	0.34	<0.26	0.47
Fluorene	ug/L	4,100	—	5/22/2015	1.2	0.52	2.8	5.3	4.3	—	—	—	—	—
				11/18/2016	1.0	0.72	5.9	3.4	4.5	0.51	11	9.8	<0.26	11
Indeno[1,2,3cd]pyrene	ug/L	3.9	—	5/22/2015	<0.020	<0.021	<0.021	<0.021	0.031	—	—	—	—	—
				11/18/2016	<0.051	<0.051	<0.05	<0.051	<0.052	<0.052	<0.051	<0.051	<0.053	<0.052
Naphthalene	ug/L	2,000	460	5/22/2015	0.70	0.52	16	20	27	—	—	—	—	—
				11/18/2016	1.50	1.7	24	11	27	320	230	170	<0.26	220
Phenanthrene	ug/L	310	—	5/22/2015	1.8	<0.52	3.3	5.8	4.4	—	—	—	—	—
				11/18/2016	1.6	1.4	9.5	5.4	5.4	27	17	13	<0.26	16
Pyrene	ug/L	3,100	—	5/22/2015	1.0	0.86	0.75	2.0	1.9	—	—	—	—	—
				11/18/2016	0.8	0.95	2.2	1.7	1.7	2.6	1.5	1.2	<0.26	1.5
1-Methylnaphthalene	ug/L	—	—	5/22/2015	—	—	—	—	—	—	—	—	—	—
				11/18/2016	3.5	3.5	46	20	31	230	160	140	<0.26	160
2-Methylnaphthalene	ug/L	0.41	—	5/22/2015	—	—	—	—	—	—	—	—	—	—
				11/18/2016	1.5	2.1	45	13	3.9	320	210	160	<0.053	200

Notes:

— No screening level for this compound.

— No sample taken at this well.

4.3 Bold: Compound detected above reporting limit.

53 Result is Greater than a relevant screening level for the property.

a - IDEM's Risk Integrated System of Closure (Revised May 1, 2009).

b - IDEM's Remediation Closure Guide (Revised 2014).

¹ Sample Taken 05/22/2015

² Sample Taken 11/18/2016

FP-4 is identified as F-4 in the Microbac Report

APPENDIX A

Boring Logs and Piezometer Construction Diagrams

Weaver Consultants Group 7121 Grape Road, Granger, IN 46530 574-271-3447(Phone)/574-271-3343(Fax)			LOG OF SOIL BORING NO.: FP-4 LOCATION: File No.: 2387-354-04-12																												
WATER LEVEL DATA NE = Not Encountered 16.0 ft While Drilling  ft At Completion** ft At ___ Hrs. A.D.* ft At ___ Day(s) A.D.*** 			Started: 11/9/2016 Completed: 11/9/2016 Geologist: P. Kostro Driller: K & S Engineering Drilling Equip.: Drilling Method: HSA (3½ I.D.)																												
			PROJECT: ArcelorMittal Burns Harbor, LLC Locomotive and Mobile Equipment Shop CLIENT: ArcelorMittal Burns Harbor, LLC 250 West US Highway 12, Burns Harbor, Indiana 46304																												
Depth (ft)	DATUM: SURFACE ELEVATION (ft) +/- :			Strata Depth (ft)	Type	Recovery	Number	Standard Penetration Test-Blows/6" (#)= "N" Value	LOI (%)	Qp (tsf)	Moisture Content %	BORING AND SAMPLING NOTES	Elevations (ft) +/-																		
	Symbol	SOIL DESCRIPTION, CLASSIFICATION and USCS or AASHTO GROUP SYMBOL																													
12/28/16		Medium dense, damp, dark brown, fine to coarse SLAG		1.5			1	10/20/9/13 (29)				PID = 0																			
12/28/16		Dense to very dense, damp, light to medium brown, medium SAND (SP)		2				4/12/18/20 (30)				PID = 0																			
12/28/16		NOTE: 1-in oxidated layer at 3 ft.		3				6/16/21/27 (37)				PID = 5.9																			
12/28/16		NOTE: 1-in organic layer at 5.5 ft.		4				9/17/21/20 (38)				PID = 84.5																			
12/28/16		NOTE: Strong petroleum odor from 8 to 12 ft.		5				6/15/23/26 (38)				PID = 322																			
12/28/16				6				11/25/27/36 (52)				PID = 466																			
12/28/16		Very dense, damp, olive green, medium SAND (SP)		12.0				12/50 for 4"/---				PID = 262																			
12/28/16		Wet at 14 ft.		14																											
12/28/16		NOTE: 2-in organic layer at 14.5 ft.		15.0				8/14/18/18 (32)				PID = 182																			
12/28/16		Dense to loose, light brown, medium SAND (SP)		16				2/2/4/4 (6)				PID = 245																			
12/28/16		Boring Terminated at 18 ft		18.0																											
NOTES: 1. Weather: 2. Used automatic hammer 3. Backfilled with auger cuttings								LEGEND <table border="0"> <tr> <td></td> <td>= Auger</td> <td></td> <td>= No Recovery</td> <td></td> <td>= Split-Spoon Sample</td> </tr> <tr> <td></td> <td>= Geoprobe</td> <td></td> <td>= Core Sample</td> <td></td> <td>= Vane Shear Test</td> </tr> <tr> <td></td> <td>= Grab Sample</td> <td></td> <td>= Shelby Tube</td> <td></td> <td></td> </tr> </table>							= Auger		= No Recovery		= Split-Spoon Sample		= Geoprobe		= Core Sample		= Vane Shear Test		= Grab Sample		= Shelby Tube		
	= Auger		= No Recovery		= Split-Spoon Sample																										
	= Geoprobe		= Core Sample		= Vane Shear Test																										
	= Grab Sample		= Shelby Tube																												

MONITORING WELL COMPLETION REPORT

Site Name:	Loco Shop O&M	County:	Porter	Well ID:	FP-4
Site Location:	Arcelor Mittal BlNorthing:		1,504,240	Easting:	483,918
Drilling Contractor:	K & S Engineers			Date Started:	11/9/2016
Head Driller:	Eric DeWitt	Helper:	Ed Deluca	Date Completed:	11/9/2016
Drilling Method:	3.25 ID HAS, SPT			Drilling Fluids 'Type':	Water as needed
Water Level at 0 Hours:	- (ft. from top of PVC)			Time Started:	8:30
Water Level at 24 hours:	14.91 (ft. from top of PVC)			Time Completed:	11:30

Annular Space Details

Type of Surface Seal:	Concrete			
Amount of Concrete	2	bag(s)	80	lbs. per bag
Type of Annular Seal:	Puregold, Medium bentonite chips			
Type of Bentonite Seal:	Puregold, Medium bentonite chips			
Amount of Bentonite:	1.5	bag(s)	50	lbs. per bag
Type of Sand Pack	Silica, Lake and Bank Sand			
Source of Sand	Flat Rock Bagging			
Amount of Sand:	6	bag(s)	50	lbs. per bag

Piezometer Construction Materials

	PVC	Stainless Steel	Teflon	Other (specify)
Riser Coupling Joint	X			
Riser Pipe Above W.T.	X			
Riser Pipe Below W.T.	X			
Screen	X			
Protective Casing				Steel

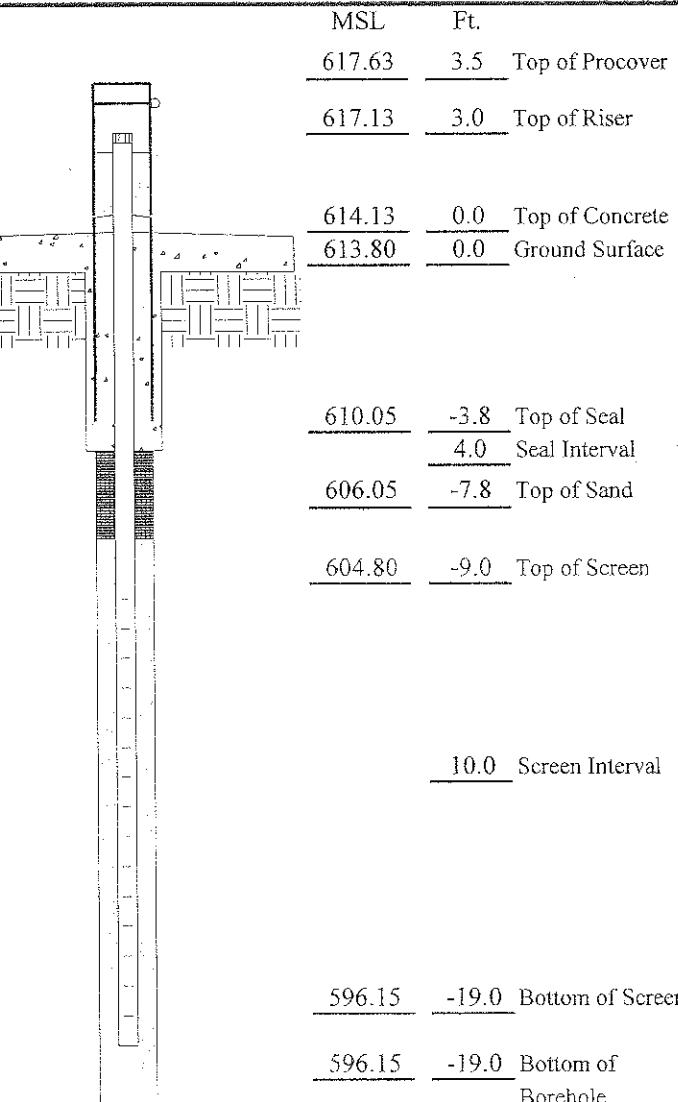
Riser Pipe Length - feet	3.0
Protective Procover Length - feet	3.5
Screen Length - feet	10'
Total Length of Casing - feet	12.33
Screen Slot Size	#10
Diameter of borehole - inches	8.25 O.D. 4.25 ID
ID of Riser Pipe - inches	2"

Notes: 1) PVC screen and riser pipe sections are flush-threaded.

Completed by: Patricia Kostro

Surveyed by: Steven Stanford, WCG

Job Number: 2387-354-04-12



7121 Grape Road | 35 E. Wacker Dr. St 1250
Granger, IN 46530 | Chicago, IL 60601
574.271.3447 | 312.922.1030
wccgrp.com

<p>Weaver Consultants Group 7121 Grape Road, Granger, IN 46530 574-271-3447(Phone)/574-271-3343(Fax)</p>			<p>LOG OF SOIL BORING NO.: FP-5 LOCATION:</p> <p>File No.: 2387-354-04-12 Sheet 1 of 1</p>																												
<p>WATER LEVEL DATA NE = Not Encountered</p>			<p>Started: 11/8/2016 Completed: 11/9/2016 Geologist: P. Kostro Driller: K & S Engineering Drilling Equip.: Drilling Method: HSA (3½ I.D.)</p>						<p>PROJECT: ArcelorMittal Burns Harbor, LLC Locomotive and Mobile Equipment Shop</p>																						
<p>13.9 ft While Drilling  ft At Completion** ft At _____ Hrs. A.D.* ft At _____ Day(s) A.D.***</p>			<p>CLIENT: ArcelorMittal Burns Harbor, LLC 250 West US Highway 12, Burns Harbor, Indiana 46304</p>																												
Depth (ft)	Symbol	DATUM: SURFACE ELEVATION (ft) +/- :	Strata Depth (ft)	Type	Recovery	Number	Standard Penetration Test-Blows/6" (#)= "N" Value	LOI (%)	Q _p (tsf)	Moisture Content %	BORING AND SAMPLING NOTES	Elevations (ft) +/-																			
2		Dark brown, fine to coarse SLAG	1.0			1	5/9/11/10 (20)				PID = 0																				
2		Medium dense, light brown to dark brown, medium SAND (SP)	2.0			2	6/16/16/18 (32)				PID = 0																				
4		Dense, damp, light brown to olive green, medium SAND (SP)	3.3			3	7/15/18/26 (33)				PID = 0																				
6		Medium dense to dense, olive green, medium SAND (SP)				4	4/11/14/15 (25)				PID = 0																				
8		Chemical or Ammonia odor				5	4/12/21/33 (33)				PID = 140																				
10		Dense, dark brown to black, ORGANIC LAYER	9.5			6	7/19/35/38 (54)				PID = 188																				
10		Very dense to dense, damp, dark gray to olive green, medium SAND (SP)	10.0			7	6/10/13/15 (23)				PID = 170																				
12		Petroleum odor				8	2/3/5/5 (8)				PID = 225																				
14						9	3/4/6/7 (10)				PID = 172																				
18		Boring Terminated at 18 ft	18.0																												
<p>NOTES: 1. Weather: 2. Used automatic hammer 3. Backfilled with auger cuttings</p>			<p>LEGEND</p> <table> <tbody> <tr> <td></td><td>= Auger</td> <td></td><td>= No Recovery</td> <td></td><td>= Split-Spoon Sample</td> </tr> <tr> <td></td><td>= Geoprobe</td> <td></td><td>= Core Sample</td> <td></td><td>= Vane Shear Test</td> </tr> <tr> <td></td><td>= Grab Sample</td> <td></td><td>= Shelby Tube</td> <td></td><td></td> </tr> </tbody> </table>												= Auger		= No Recovery		= Split-Spoon Sample		= Geoprobe		= Core Sample		= Vane Shear Test		= Grab Sample		= Shelby Tube		
	= Auger		= No Recovery		= Split-Spoon Sample																										
	= Geoprobe		= Core Sample		= Vane Shear Test																										
	= Grab Sample		= Shelby Tube																												

MONITORING WELL COMPLETION REPORT

Site Name:	Loco Shop O&M	County:	Porter	Well ID:	FP-5
Site Location:	ArcelorMittal-BINorthing:		1,504,291	Easting:	483,938
Drilling Contractor:	K&S Engineers			Date Started:	11/8/2016
Head Driller:	E. DeWitt	Helper:	E. Deluca	Date Completed:	11/9/2016
Drilling Method:	3.25" ID HSA			Drilling Fluids 'Type':	Water as needed
Water Level at 0 Hours:	- (ft. from top of PVC)			Time Started:	13:00
Water Level at 24 hours:	14.37 (ft. from top of PVC)			Time Completed:	15:05

Annular Space Details

Type of Surface Seal:	Concrete		
Amount of Concrete	2	bag(s)	80 lbs. per bag
Type of Annular Seal:	Puregold, Medium bentonite chips		
Type of Bentonite Seal:	Puregold, Medium bentonite chips		
Amount of Bentonite:	1.5	bag(s)	50 lbs. per bag
Type of Sand Pack	Silica, Lake and Bank Sand		
Source of Sand	Flat Rock Bagging		
Amount of Sand:	6	bag(s)	50 lbs. per bag

Piezometer Construction Materials

	PVC	Stainless Steel	Teflon	Other (specify)
Riser Coupling Joint	X			
Riser Pipe Above W.T.	X			
Riser Pipe Below W.T.	X			
Screen	X			
Protective Casing				Steel

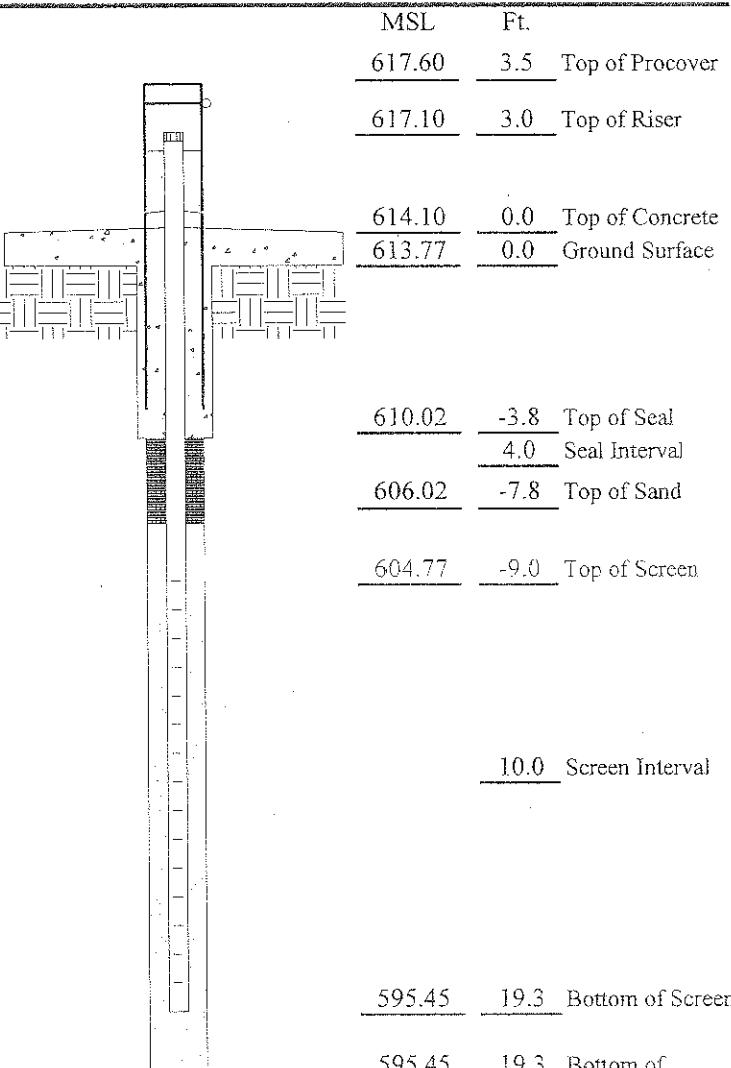
Riser Pipe Length - feet	3.0
Protective Procover Length - feet	3.5
Screen Length - feet	10.0
Total Length of Casing - feet	12.33
Screen Slot Size	#10
Diameter of borehole - inches	8.25 O.D. 4.25 ID
ID of Riser Pipe - inches	2"

Notes: 1) PVC screen and riser pipe sections are flush-threaded.

Completed by: Patricia Kostro

Surveyed by: Steven Stanford, WCG

Job Number: 2387-354-04-12



Weaver Consultants Group 7121 Grape Road, Granger, IN 46530 574-271-3447(Phone)/574-271-3343(Fax)		LOG OF SOIL BORING NO.: FP-6 LOCATION: File No.: 2387-354-04-12 Sheet 1 of 1										
WATER LEVEL DATA NE = Not Encountered		Started: 11/8/2016 Completed: 11/9/2016 Geologist: P. Kostro Driller: K & S Engineering Drilling Equip.: Drilling Method: HSA (3½ I.D.)					PROJECT: ArcelorMittal Burns Harbor, LLC Locomotive and Mobile Equipment Shop					
14.0 ft While Drilling  ft At Completion** ft At ___ Hrs. A.D.* ft At ___ Day(s) A.D.***		Geologist: P. Kostro Driller: K & S Engineering Drilling Equip.: Drilling Method: HSA (3½ I.D.)					CLIENT: ArcelorMittal Burns Harbor, LLC 250 West US Highway 12, Burns Harbor, Indiana 46304					
Depth (ft)	Symbol	DATUM: SURFACE ELEVATION (ft) +/- :	Strata Depth (ft)	Type	Recovery	Number	Standard Penetration Test-Blows/6" (#)= "N" Value	LOI (%)	Q _p (tsf)	Moisture Content %	BORING AND SAMPLING NOTES	Elevations (ft) +/-
2		Dark brown, damp, fine to coarse SLAG	2.5			1	7/50 for 4"-/-				PID = 0	
3.0		FILL - Loose, damp, dark brown, medium SAND (SP)	3.0			2	4/10/12/9 (22)				PID = 0	
4		Loose, light brown, medium SAND, dark brown/black organics at 3.75-3.85 ft (SP)	4.5			3	4/4/5/5 (9)				PID = 51.8	
5.0		Loose, dark gray to black, medium SAND, trace organics (SP)	5.0			4	3/4/4/5 (8)				PID = 65.4	
6		Loose to medium dense, olive green, medium SAND (SP), diesel odor at 5.5 to 6.0 ft	6			5	3/4/6/7 (10)				PID = 110	
8			7			6	4/7/7/6 (14)				PID = 334	
10			8			7	3/4/7/8 (11)				PID = 197	
12			9			8	3/4/6/7 (10)				PID = 189	
14			18.0			9	2/3/4/5 (7)				PID = 287	
16												
18		Boring Terminated at 18 ft										
NOTES: 1. Weather: 2. Used automatic hammer 3. Backfilled with auger cuttings		 = Auger  = No Recovery  = Split-Spoon Sample  = Geoprobe  = Core Sample  = Vane Shear Test  = Grab Sample  = Shelby Tube										

MONITORING WELL COMPLETION REPORT

Site Name:	Loco Shop O&M	County:	Porter	Well ID:	FP-6
Site Location:	ArcelorMittal- B1Northing:	1,504,353		Easting:	484,012
Drilling Contractor:	K&S Engineers			Date Started:	11/8/2016
Head Driller:	E. DeWitt	Helper:	E. Deluca	Date Completed:	11/9/2016
Drilling Method:	3.25" ID HSA			Drilling Fluids Type:	Water as needed
Water Level at 0 Hours:	-	(ft. from top of PVC)		Time Started:	9:40
Water Level at 24 hours:	13.57	(ft. from top of PVC)		Time Completed:	12:50

Annular Space Details

Type of Surface Seal:	Concrete		
Amount of Concrete	2	bag(s)	80 lbs. per bag
Type of Annular Seal:	Puregold, Medium bentonite chips		
Type of Bentonite Seal:	Puregold, Medium bentonite chips		
Amount of Bentonite:	1.5	bag(s)	50 lbs. per bag
Type of Sand Pack	Silica, Lake and Bank Sand		
Source of Sand	Flat Rock Bagging		
Amount of Sand:	6	bag(s)	50 lbs. per bag

Piezometer Construction Materials

	PVC	Stainless Steel	Teflon	Other (specify)
Riser Coupling Joint	X			
Riser Pipe Above W.T.	X			
Riser Pipe Below W.T.	X			
Screen	X			
Protective Casing				Steel

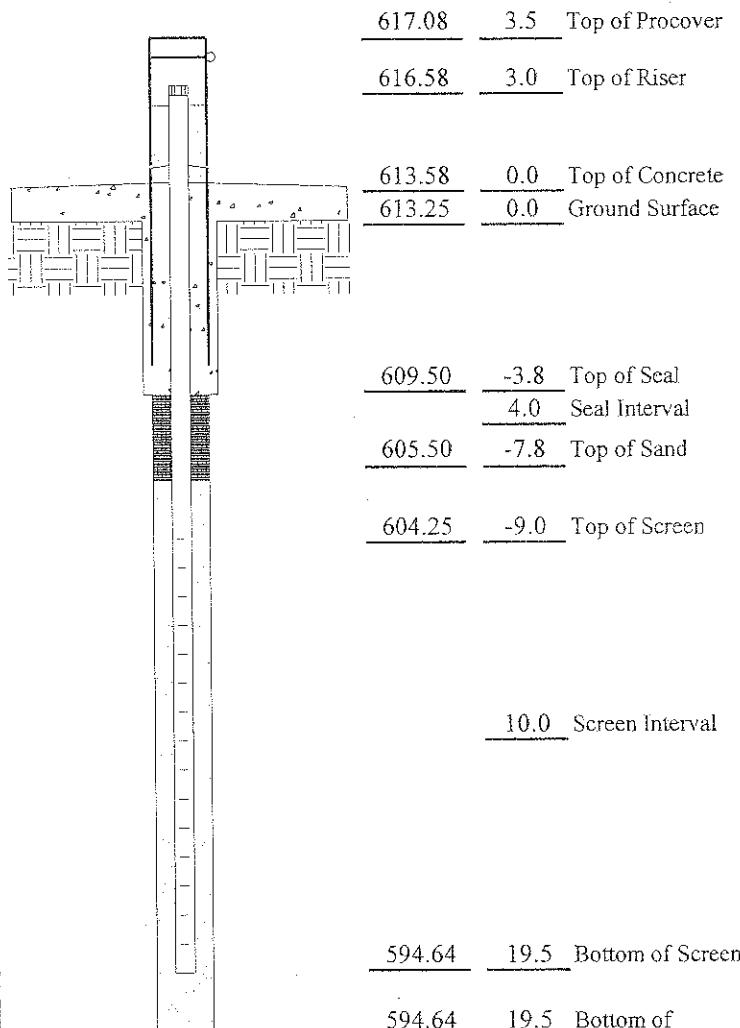
Riser Pipe Length - feet	3.0
Protective Procover Length - feet	3.5
Screen Length - feet	10.0
Total Length of Casing - feet	12.33
Screen Slot Size	#10
Diameter of borehole - inches	8.25 O.D. 4.25 ID
ID of Riser Pipe - inches	2"

Notes: 1) PVC screen and riser pipe sections are flush-threaded.

Completed by: Patricia Kostro

Surveyed by: Steven Stanford, WCG

Job Number: 2387-354-04-12



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APPENDIX B

Groundwater Sampling Field Sheets

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: EPA-11-18-16

Site Name: Arcelor Mittal-Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12

Purpose For Sampling: Environmental Sampling Well Stick-up: H/A ft.

Well I.D.: FB-1 Sample I.D.: FP-1

Total Depth (Top of PVC): 19.46 ft. Water (Top of PVC): 9.73 ft. Water Column 9.73 ft.

PVC Elev: H/A ft. (NGVD) Groundwater Elev: H/A ft. (NGVD)

Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind S 12 mph

Time Purged: From: 12:17 To: 12:30 Well Diameter: 2 Inches

Max Purge Rate: 300 mL/min Volume Purged: 12.0 L.

Avg Purge Rate: 800 mL/min Purge Device/Sample Device: 12 V Submersible Pump

Time Sampled: From: 12:30 To: 12:45

Sample Appearance: milky Petro odor dk grey

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μ S) (+/- 3%)	Temp (°C) (+/- 3%)
1	12:23	10.11	6.12	210	19.3
2	12:26	10.11	6.12	870	19.3
3	12:29	10.11	6.11	880	19.3
4 (optional)					
5 (optional)					
6 (optional)					
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

D o

8.19
8.17
8.17

Signature of Sampler: P. KOSTRO

P. EKKENS

Field Team Members: P. Kostro

P. Ekkens

Remarks: 12:30 Field Blank - 1

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: 4/18/16

Site Name: Arcelor Mittal -Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12
 Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.
 Well I.D.: FP-4 Sample I.D.: FP-4
 Total Depth (Top of PVC): 20.95 ft. Oil (Top of PVC): 14.18 ft. Water Column 9.76 ft.
 PVC Elev: N/A ft. (NGVD) Groundwater Elev: _____ ft. (NGVD)
 Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60°F Wind S 12 mph
 Time Purged: From: 1311 To: _____ Well Diameter: 2 Inches
 Max Purge Rate: 700 mL/min Volume Purged: 12.0 L.
 Avg Purge Rate: 700 mL/min Purge Device/Sample Device: 12 V Submersible Pump
 Time Sampled: From: 1320 To: 1335
 Sample Appearance: Clear light brown petro odor oil

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μ S) (+/- 3%)	Temp (°C) (+/- 3%)
1	1313	14.33	6.92	320	18.1
2	1314	14.33	6.92	330	18.0
3	1319	14.35	6.92	320	18.0
4 (optional)					
5 (optional)					
6 (optional)					
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

Signature of Sampler: P. Kostro D. Ekkens

Field Team Members: P. KOSTRO D. EKKENS

Remarks: Test m 3-1 1325 m 50-1 1330

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: 11/18/16

Site Name: Arcelor Mittal -Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12

Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.

Well I.D.: FP-5 Sample I.D.: FP-5

Total Depth (Top of PVC): 21.65 ft. Water (Top of PVC): 14.37 ft. Water Column 7.28 ft.

PVC Elev: N/A ft. (NGVD) Groundwater Elev: N/A ft. (NGVD)

Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind 6-12 mph

Time Purged: From: 1346 To: 1359 Well Diameter: 2 Inches

Max Purge Rate: 900 mL/min Volume Purged: 12.0 L.

Avg Purge Rate: 900 mL/min Purge Device/Sample Device: 12 V Submersible Pump

Time Sampled: From: 1359 To: 1415

Sample Appearance: brown turbid Petro odor

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μ S) (+/- 3%)	Temp (°C) (+/- 3%)
1	1359	14.29	7.01	150	18.4
2	1359	14.27	6.97	160	18.4
3	1359	14.27	6.96	160	18.4
4 (optional)					
5 (optional)					
6 (optional)					
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

Signature of Sampler: Dale L. Kostro

Field Team Members: KOSTRO D. ELLIOTT

Remarks: DNR FOAM DURING PURGE

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: 11-18-16

Site Name: Arcelor Mittal -Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12
 Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.
 Well I.D.: FP-6 Sample I.D.: FP-6
 Total Depth (Top of PVC): 21.44 ft. Water (Top of PVC): 13.57 ft. Water Column 8.37 ft.
 PVC Elev: N/A ft. (NGVD) Groundwater Elev: N/A ft. (NGVD)
 Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60°F Wind S 12 MPH
 Time Purged: From: 1436 To: 1447 Well Diameter: 2 Inches
 Max Purge Rate: 900 mL/min Volume Purged: 12.0 L.
 Avg Purge Rate: WMA mL/min Purge Device/Sample Device: 12 V Submersible Pump
 Time Sampled: From 1447 To: 1452
 Sample Appearance: light brown clear petro odor

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (µS) (+/- 3%)	Temp (°C) (+/- 3%)
1	1439	13.65	6.69	310	18.70
2	1442	13.65	6.67	290	18.70
3	1445	13.45	6.67	290	18.65
4 (optional)					8.47
5 (optional)					8.29
6 (optional)					8.31
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

Signature of Sampler: P. KOSTRO D. EKLEN

Field Team Members: D. KOSTRO D. EKLEN

Remarks:

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be needed necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Water 10.47
0.1 ft

Sample Date: 11-18

Site Name: Arcelor Mittal -Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12

Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.

Well I.D.: RW-1 Sample I.D.: RW-1

Total Depth (Top of PVC): 17.62 ft. Water (Top of PVC): 10.47 ft. Water Column 7.15 ft.

PVC Elev: N/A ft. (NGVD) Groundwater Elev: N/A ft. (NGVD)

Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind 5-13 mph

Time Purged: From: 0931 To: 0940 Well Diameter: 4 Inches

Max.Purge Rate: 1.5 mL/min Volume Purged: 12 L

Avg Purge Rate: mL/min Purge Device/Sample Device: 12 V Submersible Pump

Time Sampled: From: 0940 To: 0950

Sample Appearance: Turbid Dark grey Ammonia or S odor

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μS) (+/- 3%)	Temp (°C) (+/- 3%)
1	0935	11.06	6.78	3.50	19.8
2	0938	11.10	6.74	3.30	19.8
3	0938	11.15	6.74	3.10	19.9
4 (optional)					19.8
5 (optional)					19.8
6 (optional)					19.9
7 (optional)					19.9
8 (optional)					19.9
9 (optional)					19.9
10 (optional)					19.9

Signature of Sampler: Robert H. Kostro

Field Team Members: D. K. Kostro S. Stanford

Remarks:

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Water 10.36
Oil

Sample Date: 11-18-16

Site Name: Arcelor Mittal - Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12

Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.

Well I.D.: RW-2 Sample I.D.: RW-2

Total Depth (Top of PVC): 18.75 ft. Water (Top of PVC): 10.36 ft. Water Column 9.39 ft.

PVC Elev: N/A ft. (NGVD) Groundwater Elev: N/A ft. (NGVD)

Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind 513 MPH

Time Purged: From: 1003 To: 1013 Well Diameter: 4 Inches

Max Purge Rate: 1000 mL/min Volume Purged: 12.0 L.

Avg Purge Rate: 1000 mL/min Purge Device/Sample Device: 12 V Submersible Pump

Time Sampled: From: 1013 To: 1017

Sample Appearance: turbid petro odor hydrocarbon oil grey

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (µS) (+/- 3%)	Temp (°C) (+/- 3%)
1	1005	10.95	7.06	1360	19.4
2	1008	11.21	6.93	1360	19.6
3	1011	11.35	7.11	1350	19.5
4 (optional)					7.74
5 (optional)					7.08
6 (optional)					7.35
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

Signature of Sampler: KOSTRU SAMPLER

Field Team Members: Patricia Koslow

Remarks:

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: 11-18-16

Site Name: Arcelor Mittal - Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12

Purpose For Sampling: Environmental Sampling Well Stick-up: N/A ft.

Well I.D.: RW-3 Sample I.D.: RW-3

Total Depth (Top of PVC): 1019.21 ft. Water (Top of PVC): 10.60 ft. Water Column 9.61 ft.

PVC Elev: ND ft. (NGVD) Groundwater Elev: ND ft. (NGVD)

Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind S 13 MPH

Time Purged: From: 1123 To: 1132 Well Diameter: 4" Inches

Max Purge Rate: 1100 mL/min Volume Purged: 18.0 L.

Avg Purge Rate: mL/min Purge Device/Sample Device: 12 V Submersible Pump

Time Sampled: From: 1132 To: 1205

Sample Appearance: turbid, petro odor, light brown

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μ S) (+/- 3%)	Temp (°C) (+/- 3%)
1	1124	11.02	6.57	470	19.8
2	1127	11.08	6.53	440	20.1
3	1130	10.75	6.44	450	19.8
4 (optional)					
5 (optional)					
6 (optional)					
7 (optional)					
8 (optional)					
9 (optional)					
10 (optional)					

Signature of Sampler: Patricia Loster

Field Team Members: Patricia Loster

Remarks: didn't purge fbam, also drew the well down due to oxygenated water purged product after 16 liters

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

10-12

WEAVER CONSULTANTS GROUP
GROUNDWATER FIELD DATA SHEET

Sample Date: 11-18-16

Site Name: Arcelor Mittal - Locomotive & Mobile Equipment Shop File Number: 2387-354-04-12
 Purpose For Sampling: Environmental Sampling Well Stick-up: _____ ft.
 Well I.D.: RW-4 Sample I.D.: RW-4
 Total Depth (Top of PVC): 18.91 ft. Water (Top of PVC): 10.72 ft. Water Column _____ ft.
 PVC Elev: _____ ft. (NGVD) Groundwater Elev: _____ ft. (NGVD)
 Weather Conditions: Sunny Partly Cloudy Cloudy Temp 60° Wind 5.13 mph
 Time Purged: From: 1044 To: 1057 Well Diameter: _____ Inches
 Max Purge Rate: 950 mL/min Volume Purged: 12.16 L.
 Avg Purge Rate: _____ mL/min Purge Device/Sample Device: 12 V Submersible Pump
 Time Sampled: From: 1044 To: 1055
 Sample Appearance: turbid pets odor, light grey

Laboratory Analysis:	Container Size:	Container Type:	Preservative/Type:	Field Filtered:	Head Space:
VOC 8260	3 x 40 mL	VOA Vial	HCl	No	No
PAH SIM	2 x 100 mL	Amber glass	None	No	Yes

Measurement ID* (3-5 minute intervals)	Time of day	Water Level (Top of PVC)	pH (SU) (+/- 0.1 SU)	Sp. Cond. (μ S) (+/- 3%)	Temp (°C) (+/- 3%)
1	1044	11.33	6.91	1170	19.9
2	1052	11.48	6.77	1120	20.0
3	1055	11.59	6.71	1170	20.1
4 (optional)					20.0
5 (optional)					20.0
6 (optional)					20.0
7 (optional)					20.0
8 (optional)					20.0
9 (optional)					20.0
10 (optional)					20.0

Signature of Sampler: Kostro Pah R. Kostro

Field Team Members: P. Kostro

Remarks: _____

*Purge at 100 to 1000 mL minute to keep WL changes to 0.3 ft or less if practicable. If well recharges poorly, additional drawdown may be necessary. Stabilization will be considered achieved when three consecutive measurements, taken at 3 to 5 minute intervals, are within the limits specified above for all parameters. If greater than 10 measurements are required, record on separate sheet of paper.

APPENDIX C

Weekly Operating Records



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 10/7/2016 Time: 11:00 PM Observations by: David Ekkens
Weather Conditions: Cloudy 68°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

		Read from Tank Chart
Total Fluid Level in Tank (in):	<u>16.75</u>	Total Fluid Volume in Tank (gal): <u>160.64</u>
Water Level in Tank (in):	<u>16.50</u>	Water Volume in tank (gal): <u>157.34</u>
		Oil Volume in Tank (total fluid volume less water volume (gal): <u>3.30</u>

Pumping time (Read from Controller): **RW-1** 844 :hr 33 :min **RW-3** 772 :hr 22 :min
 RW-2 617 :hr 30 :min **RW-4** 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in):	<u>0.00</u>	Free Product in RW-3 (in):	<u>0.00</u>
Free Product in RW-2 (in):	<u>0.00</u>	Free Product in RW-4 (in):	<u>0.00</u>

Wrung out oil socks.
Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 10/14/2016 Time: 11:00 PM Observations by: David Ekkens
Weather Conditions: Clear 64°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 16.75 Read from Tank Chart
Water Level in Tank (in): 16.50
Total Fluid Volume in Tank (gal): 160.64
Water Volume in tank (gal): 157.34
Oil Volume in Tank (total fluid volume less water volume (gal)): 3.30

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 772 :hr 22 :min
 RW-2 617 :hr 30 :min RW-4 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00 Free Product in RW-3 (in): 0.00
Free Product in RW-2 (in): 0.00 Free Product in RW-4 (in): 0.00

Wrung out oil socks.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 10/21/2016 Time: 11:00 PM Observations by: David Ekkens
Weather Conditions: Rainy 61°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
If no, was it replaced? N/A
Blower Filter OK? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Air Compressor Operating Normally? (Y/N): Y
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

			Read from Tank Chart
Total Fluid Level in Tank (in):	<u>16.75</u>	Total Fluid Volume in Tank (gal):	<u>160.64</u>
Water Level in Tank (in):	<u>16.50</u>	Water Volume in tank (gal):	<u>157.34</u>
Oil Volume in Tank (total fluid volume less water volume (gal):			<u>3.30</u>
Pumping time (Read from Controller):	<u>RW-1</u> <u>844</u> :hr <u>33</u> :min	<u>RW-3</u> <u>772</u> :hr <u>22</u> :min	
	<u>RW-2</u> <u>617</u> :hr <u>30</u> :min	<u>RW-4</u> <u>783</u> :hr <u>57</u> :min	

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in):	<u>0.00</u>	Free Product in RW-3 (in):	<u>0.00</u>
Free Product in RW-2 (in):	<u>0.00</u>	Free Product in RW-4 (in):	<u>0.00</u>

Wrung out oil socks.
Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 10/28/2016 Time: 2:00 PM Observations by: Patricia Kostro
Weather Conditions: Cloudy 54°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 16.75
Water Level in Tank (in): 16.50

Read from Tank Chart
Total Fluid Volume in Tank (gal): 160.64
Water Volume in tank (gal): 157.34
Oil Volume in Tank (total fluid volume less water volume (gal)): 3.30

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 772 :hr 22 :min
 RW-2 617 :hr 30 :min RW-4 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00
Free Product in RW-2 (in): 0.00

Free Product in RW-3 (in): 0.00
Free Product in RW-4 (in): 0.00

Wrung out oil socks.
Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 11/4/2016 Time: 1:00 PM Observations by: Patricia Kostro
Weather Conditions: Sunny 57°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

			Read from Tank Chart
Total Fluid Level in Tank (in):	16.75	Total Fluid Volume in Tank (gal):	160.64
Water Level in Tank (in):	16.50	Water Volume in tank (gal):	157.34
Oil Volume in Tank (total fluid volume less water volume (gal):			3.30

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 772 :hr 22 :min
RW-2 617 :hr 30 :min RW-4 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in):	0.00	Free Product in RW-3 (in):	0.00
Free Product in RW-2 (in):	0.00	Free Product in RW-4 (in):	0.00

Remarks:
Wrung out oil socks.

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wccgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 11/11/2016 Time: 11:30 PM Observations by: D. Ekkens
Weather Conditions: Light Rain 53°F Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low 185 :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 82
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 16.75 Read from Tank Chart
Water Level in Tank (in): 16.50 Total Fluid Volume in Tank (gal): 160.64
Water Volume in tank (gal): 157.34
Oil Volume in Tank (total fluid volume less water volume (gal): 3.30

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 772 :hr 22 :min
RW-2 617 :hr 30 :min RW-4 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00 Free Product in RW-3 (in): 0.00
Free Product in RW-2 (in): 0.00 Free Product in RW-4 (in): 0.00

Wrung out oil socks.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
7121 Grape Road
Granger, Indiana 46530

(574) 271-3447 Tel.
(574) 271-3343 Fax.
sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 11/18/2016

Time: 12:00 PM

Observations by: D. Ekkens

Weather Conditions:

Light Rain 60°F

Weaver Consultants Group, LLC

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression

Blower Operating Normally? (Y/N): OFF

Blower Vacuum on Arrival (in H₂O): 0

Blower Vacuum on Departure (in H₂O): 0

Blower Filter OK? (Y/N): Y

If no, was it replaced? N/A

Air Compressor Operating Normally? (Y/N): Y

Observed cycle pressures (psi): 130 :Low 185 :High

Compressor Auto Drain OK? (Y/N): N

Pump Pressure (psi): 82

Shed Exhaust Fan Working Normally? (Y/N): Y

Set Point for Operation (°F): 90

Shed Heater Operating Normally? (Y/N): Y

Set Point for Operation (°F): 50

Water in Vacuum Lines? No

Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 19.50

Read from Tank Chart

Water Level in Tank (in): 19.00

Total Fluid Volume in Tank (gal): 197.14

Water Volume in tank (gal): 190.41

Oil Volume in Tank (total fluid volume less water volume (gal): 6.73

Pumping time (Read from Controller): RW-1 844 :hr 33 :min
RW-2 617 :hr 30 :min

RW-3 772 :hr 22 :min
RW-4 783 :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00

Free Product in RW-3 (in): 0.00

Free Product in RW-2 (in): 0.00

Free Product in RW-4 (in): 0.00

Wrung out oil socks.

Remarks:

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Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 12/2/2016 Time: 2:00 PM Observations by: S. Stanford
Weather Conditions: Cloudy 40°F

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low ## :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 0
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Read from Tank Chart

Total Fluid Level in Tank (in): <u>19.50</u>	Total Fluid Volume in Tank (gal): <u>197.14</u>
Water Level in Tank (in): <u>18.75</u>	Water Volume in tank (gal): <u>187.11</u>
Oil Volume in Tank (total fluid volume less water volume (gal): <u>10.03</u>	

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 ## :hr 22 :min
 RW-2 617 :hr 30 :min RW-4 ## :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): <u>0.00</u>	Free Product in RW-3 (in): <u>0.00</u>		
Free Product in RW-2 (in): <u>0.00</u>	Free Product in RW-4 (in): <u>0.00</u>		
FP-1: <u>0.00</u>	FP-4: <u>4.00</u>	FP-5: <u>0.75</u>	FP-6: <u>0.00</u>

Wrung out oil socks. No oil yield. System remains shutdown. Bailed 2 gal. fluid from FP-4 and put into tank.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
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(574) 271-3343 Fax.
sstanford@wccgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 12/9/2016

Time: 11:30 AM

Observations by: D. Ekkens

Weather Conditions: Cloudy 26°F

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression

Blower Operating Normally? (Y/N): OFF

Blower Vacuum on Arrival (in H₂O): 0

Blower Vacuum on Departure (in H₂O): 0

Blower Filter OK? (Y/N): Y

If no, was it replaced? N/A

Air Compressor Operating Normally? (Y/N): Y

Observed cycle pressures (psi): 130 :Low ## :High

Compressor Auto Drain OK? (Y/N): N

Pump Pressure (psi): 0

Shed Exhaust Fan Working Normally? (Y/N): Y

Set Point for Operation (°F): 90

Shed Heater Operating Normally? (Y/N): Y

Set Point for Operation (°F): 50

Water in Vacuum Lines? No

Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 19.50

Read from Tank Chart

Water Level in Tank (in): 18.75

Total Fluid Volume in Tank (gal): 197.14

Water Volume in tank (gal): 187.11

Oil Volume in Tank (total fluid volume less water volume (gal): 10.03

Pumping time (Read from Controller): RW-1 844 :hr 33 :min
RW-2 617 :hr 30 :min

RW-3 ## :hr 22 :min
RW-4 ## :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00

Free Product in RW-3 (in): 0.00

Free Product in RW-2 (in): 0.00

Free Product in RW-4 (in): 0.00

FP-1: 0.00 FP-4: 4.00

FP-5: 1.00 FP-6: Sheen

Wrung out oil socks. No oil yield. System remains shutdown. Bailed 2 gal. fluid from FP-4 and put into tank.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
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sstanford@wcgrp.com

Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 12/16/2016 Time: 11:30 AM Observations by: D. Ekkens
Weather Conditions: Cloudy 16°F

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low ## :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 0
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

			Read from Tank Chart
Total Fluid Level in Tank (in):	<u>19.50</u>		Total Fluid Volume in Tank (gal): <u>197.14</u>
Water Level in Tank (in):	<u>18.75</u>		Water Volume in tank (gal): <u>187.11</u>
			Oil Volume in Tank (total fluid volume less water volume (gal): <u>10.03</u>

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 ## :hr 22 :min
 RW-2 617 :hr 30 :min RW-4 ## :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in):	<u>0.00</u>	Free Product in RW-3 (in):	<u>0.00</u>
Free Product in RW-2 (in):	<u>0.00</u>	Free Product in RW-4 (in):	<u>0.00</u>
FP-1:	<u>0.00</u>	FP-4:	<u>4.00</u>
			FP-5: <u>1.00</u>
			FP-6: <u>Sheen</u>

Wrung out oil socks. No oil yield. System remains shutdown. Bailed 2 gal. fluid from FP-4 and put into tank.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
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Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 12/22/2016

Time: 2:30 PM

Observations by: D. Ekkens

Weather Conditions: Clear 46°F

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression

Blower Operating Normally? (Y/N): OFF

Blower Vacuum on Arrival (in H₂O): 0

Blower Vacuum on Departure (in H₂O): 0

Blower Filter OK? (Y/N): Y

If no, was it replaced? N/A

Air Compressor Operating Normally? (Y/N): Y

Observed cycle pressures (psi): 130 :Low ## :High

Compressor Auto Drain OK? (Y/N): N

Pump Pressure (psi): 0

Shed Exhaust Fan Working Normally? (Y/N): Y

Set Point for Operation (°F): 90

Shed Heater Operating Normally? (Y/N): Y

Set Point for Operation (°F): 50

Water in Vacuum Lines? No

Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 19.50

Read from Tank Chart

Water Level in Tank (in): 18.75

Total Fluid Volume in Tank (gal): 197.14

Water Volume in tank (gal): 187.11

Oil Volume in Tank (total fluid volume less water volume (gal): 10.03

Pumping time (Read from Controller): RW-1 844 :hr 33 :min
RW-2 617 :hr 30 :min

RW-3 ## :hr 22 :min
RW-4 ## :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in): 0.00

Free Product in RW-3 (in): 0.00

Free Product in RW-2 (in): 0.00

Free Product in RW-4 (in): 0.00

FP-1: 0.00 FP-4: 4.00

FP-5: 1.00 FP-6: Sheen

Wrung out oil socks. No oil yield. System remains shutdown. Bailed 2 gal. fluid from FP-4 and put into tank.

Remarks:

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Project No. 2387-354-04-11



Weekly Operations and Maintenance Report
Mittal Steel USA
Burns Harbor
Locomotive Shop Diesel Fuel Remediation System

Date: 12/29/2016 Time: 12:00 PM Observations by: D. Ekkens
Weather Conditions: Cloudy 34°F

FUNCTIONAL PARAMETERS

Panel Warning Lights Illuminated? (Y/N): N :Full Tank N :Low Vac. N :Low Press. N :Fire Suppression
Blower Operating Normally? (Y/N): OFF
Blower Vacuum on Arrival (in H₂O): 0 Blower Vacuum on Departure (in H₂O): 0
Blower Filter OK? (Y/N): Y If no, was it replaced? N/A
Air Compressor Operating Normally? (Y/N): Y Observed cycle pressures (psi): 130 :Low ## :High
Compressor Auto Drain OK? (Y/N): N
Pump Pressure (psi): 0
Shed Exhaust Fan Working Normally? (Y/N): Y Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y Set Point for Operation (°F): 50
Water in Vacuum Lines? No
Compressor Oil Level OK? OK

OIL RECOVERY MEASUREMENTS

Total Fluid Level in Tank (in): 19.50 Read from Tank Chart
Water Level in Tank (in): 18.75 Total Fluid Volume in Tank (gal): 197.14
Oil Volume in Tank (total fluid volume less water volume (gal)): 10.03
Water Volume in tank (gal): 187.11

Pumping time (Read from Controller): RW-1 844 :hr 33 :min RW-3 ## :hr 22 :min
 RW-2 617 :hr 30 :min RW-4 ## :hr 57 :min

FREE PRODUCT MEASUREMENTS

Free Product in RW-1 (in):	<u>0.00</u>	Free Product in RW-3 (in):	<u>0.00</u>
Free Product in RW-2 (in):	<u>0.00</u>	Free Product in RW-4 (in):	<u>0.00</u>
FP-1:	<u>0.00</u>	FP-4:	<u>4.00</u>
			FP-5: <u>1.00</u>
			FP-6: <u>Sheen</u>

Wrung out oil socks. No oil yield. System remains shutdown. Bailed 2 gal. fluid from FP-4 and put into tank.

Remarks:

Contact: S. Stanford, Weaver Consultants Group, LLC
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Granger, Indiana 46530

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sstanford@wcgrp.com

Project No. 2387-354-04-11

APPENDIX D

Groundwater Sampling Analytical Report



November 30, 2016

Arcelor Mittal USA, Inc.
250 W US Highway 12
Burns Harbor, IN 46304-9745

Work Order No.: 16K1374

Re: AM Locomotive Shop

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 11 sample(s) on 11/18/2016 4:40:00PM for the analyses presented in the following report as Work Order 16K1374.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

A handwritten signature in black ink that reads "Carey Gadzala".

Carey Gadzala
Project Manager

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8378 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com

**WORK ORDER SAMPLE SUMMARY**

Date: Wednesday, November 30, 2016

Client: Arcelor Mittal USA, Inc.

Project: AM Locomotive Shop

Lab Order: 16K1374

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16K1374-01	RW-1		11/18/2016 09:40	11/18/2016 4:40:00PM
16K1374-02	RW-2		11/18/2016 10:13	11/18/2016 4:40:00PM
16K1374-03	RW-4		11/18/2016 10:57	11/18/2016 4:40:00PM
16K1374-04	RW-3		11/18/2016 11:32	11/18/2016 4:40:00PM
16K1374-05	FP-1		11/18/2016 12:30	11/18/2016 4:40:00PM
16K1374-06	Field Blank		11/18/2016 12:30	11/18/2016 4:40:00PM
16K1374-07	F-4		11/18/2016 13:20	11/18/2016 4:40:00PM
16K1374-08	FP-5		11/18/2016 13:59	11/18/2016 4:40:00PM
16K1374-09	FP-6		11/18/2016 14:47	11/18/2016 4:40:00PM
16K1374-10	Dup-1		11/18/2016 13:30	11/18/2016 4:40:00PM
16K1374-11	TB		11/18/2016 00:00	11/18/2016 4:40:00PM

Microbac Laboratories, Inc.

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CASE NARRATIVE

Date: Wednesday, November 30, 2016

Client: Arcelor Mittal USA, Inc.

Project: AM Locomotive Shop

Lab Order: 16K1374

The Matrix Spike and Matrix Spike Duplicate samples failed the accuracy criteria for Anthracene, Benzo[ghi]perylene, Chrysene, Dibenz[ah]anthracene, and Phenanthrene with low bias and for Naphthalene and Fluorene with high bias. These biases are due to the high indigenous analyte concentrations (relative to the spike amounts). The following sample was spiked.

Laboratory ID Sample Name

16K1374-07 F-4

At the time of analysis the pHs of the following samples were greater than 2. These samples failed to meet the VOA preservation criteria.

Laboratory ID Sample Name

16K1374-02 RW-2

16K1374-03 RW-4

16K1374-04 RW-3

The Matrix Spike and Matrix Spike Duplicate samples failed the accuracy criteria for benzene, ethyl benzene, and m,p-xylene. These biases are due to the high indigenous analyte concentrations (relative to the spike amounts). The following sample was spiked.

Laboratory ID Sample Name

16K1374-07 F-4



Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	16K1374-01
Client Project:	AM Locomotive Shop	Sampled:	11/18/2016 9:40
Client Sample ID:	RW-1	Received:	11/18/2016 16:40
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								
Prep Method: 40CFR136								
LL Polynuclear Aromatic Hydrocarbons by GC/MS								Prep Date/Time: 11/22/2016 09:15
Acenaphthene	ldl	A	1.2	0.25	ND	µg/L	1	11/22/2016 17:56
Acenaphthylene	ldl	A	ND	0.25	ND	µg/L	1	11/22/2016 17:56
Anthracene	ldl	A	ND	0.25	ND	µg/L	1	11/22/2016 17:56
Benzo[a]anthracene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Benzo[a]pyrene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Benzo[b]fluoranthene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Benzo[g,h,i]perylene	ldl	A	ND	0.10	ND	µg/L	1	11/22/2016 17:56
Benzo[k]fluoranthene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Chrysene	ldl	A	ND	0.25	ND	µg/L	1	11/22/2016 17:56
Dibenz[a,h]anthracene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Fluoranthene	ldl	A	ND	0.25	ND	µg/L	1	11/22/2016 17:56
Fluorene	ldl	A	1.0	0.25	ND	µg/L	1	11/22/2016 17:56
Indeno[1,2,3cd]pyrene	ldl	A	ND	0.051	ND	µg/L	1	11/22/2016 17:56
Naphthalene	ldl	A	1.5	0.25	ND	µg/L	1	11/22/2016 17:56
Phenanthrene	ldl	A	1.6	0.25	ND	µg/L	1	11/22/2016 17:56
Pyrene	ldl	A	0.78	0.25	ND	µg/L	1	11/22/2016 17:56
1-Methylnaphthalene	I	B	3.5	0.25	ND	µg/L	1	11/22/2016 17:56
2-Methylnaphthalene	I	B	1.5	0.051	ND	µg/L	1	11/22/2016 17:56
Surr: 2-Fluorobiphenyl	S		49.6	10-110	%REC		1	11/22/2016 17:56
Surr: Nitrobenzene-d5	S		62.3	10-110	%REC		1	11/22/2016 17:56
Surr: Terphenyl-d14	S		32.7	16.8-110	%REC		1	11/22/2016 17:56

BTEX and MTBE				Method: SW-846 8260B			Analyst:jin	
Prep Date/Time: 11/28/2016 10:30								
Benzene	dil	A	ND	5.0	ND	µg/L	1	11/28/2016 14:57
Ethylbenzene	dil	A	5.4	5.0	ND	µg/L	1	11/28/2016 14:57
m,p-Xylene	dil	A	ND	5.0	ND	µg/L	1	11/28/2016 14:57
Methyl-Butyl Ether	dil	A	ND	5.0	ND	µg/L	1	11/28/2016 14:57
o-Xylene	dil	A	ND	5.0	ND	µg/L	1	11/28/2016 14:57
Toluene	dil	A	ND	5.0	ND	µg/L	1	11/28/2016 14:57
Total Xylenes	dil	M	ND	5.0	ND	µg/L	1	11/28/2016 14:57
Surr: 4-Bromofluorobenzene	S		193.4	80-120	%REC		1	11/28/2016 14:57

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.6379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



Analytical Results

Date: Wednesday, November 30, 2016

Client: Arcelor Mittal USA, Inc.
Client Project: AM Locomotive Shop
Client Sample ID: RW-2
Sample Description:
Matrix: Aqueous

Work Order/ID: 16K1374-02
Sampled: 11/18/2016 10:13
Received: 11/18/2016 16:40

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								
Prep Method: 40CFR136								
LL Polynuclear Aromatic Hydrocarbons by GC/MS								Prep Date/Time: 11/22/2016 09:15
Acenaphthene	ldi	A	0.48		0.26	µg/L	1	11/22/2016 18:16
Acenaphthylene	ldi	A	ND		0.26	µg/L	1	11/22/2016 18:16
Anthracene	ldi	A	ND		0.26	µg/L	1	11/22/2016 18:16
Benzof[a]anthracene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Benzof[a]pyrene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Benzof[b]fluoranthene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Benzof[g,h,i]perylene	ldi	A	ND		0.10	µg/L	1	11/22/2016 18:16
Benzof[k]fluoranthene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Chrysene	ldi	A	ND		0.26	µg/L	1	11/22/2016 18:16
Dibenz[a,h]anthracene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Fluoranthene	ldi	A	ND		0.26	µg/L	1	11/22/2016 18:16
Fluorene	ldi	A	0.72		0.26	µg/L	1	11/22/2016 18:16
Indeno[1,2,3cd]pyrene	ldi	A	ND		0.051	µg/L	1	11/22/2016 18:16
Naphthalene	ldi	A	1.7		0.26	µg/L	1	11/22/2016 18:16
Phenanthere	ldi	A	1.4		0.26	µg/L	1	11/22/2016 18:16
Pyrene	ldi	A	0.95		0.26	µg/L	1	11/22/2016 18:16
1-Methylnaphthalene	I	B	3.5		0.26	µg/L	1	11/22/2016 18:16
2-Methylnaphthalene	I	B	2.1		0.051	µg/L	1	11/22/2016 18:16
Surr: 2-Fluorobiphenyl	S		50.7	10-110	%REC		1	11/22/2016 18:16
Surr: Nitrobenzene-d5	S		59.9	10-110	%REC		1	11/22/2016 18:16
Surr: Terphenyl-d14	S		36.1	16.8-110	%REC		1	11/22/2016 18:15

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8260B								
Prep Date/Time: 11/28/2016 10:30								
BTEX and MTBE								
Benzene	dil	A	ND		5.0	µg/L	1	11/28/2016 15:18
Ethylbenzene	dil	A	5.9		5.0	µg/L	1	11/28/2016 15:18
m,p-Xylene	dil	A	ND		5.0	µg/L	1	11/28/2016 15:18
Methyl-t-Butyl Ether	dil	A	ND		5.0	µg/L	1	11/28/2016 15:18
o-Xylene	dil	A	ND		5.0	µg/L	1	11/28/2016 15:18
Toluene	dil	A	ND		5.0	µg/L	1	11/28/2016 15:18
Total Xylenes	dil	M	ND		5.0	µg/L	1	11/28/2016 15:18
Surr: 4-Bromofluorobenzene	S		94.3	80-120	%REC		1	11/28/2016 15:18

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Analytical Results

Date: Wednesday, November 30, 2016

Client: Arcelor Mittal USA, Inc.
 Client Project: AM Locomotive Shop
 Client Sample ID: RW-4
 Sample Description:
 Matrix: Aqueous

Work Order/ID: 16K1374-03
 Sampled: 11/18/2016 10:57
 Received: 11/18/2016 16:40

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								Analyst: CLR
Prep Method: 40CFR136								Prep Date/Time: 11/22/2016 09:15
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	2.1	0.25	µg/L	1		11/22/2016 18:36
Acenaphthylene	ldi	A	0.42	0.25	µg/L	1		11/22/2016 18:36
Anthracene	ldi	A	1.0	0.25	µg/L	1		11/22/2016 18:36
Benzo[a]anthracene	ldi	A	0.061	0.051	µg/L	1		11/22/2016 18:36
Benzo[a]pyrene	ldi	A	ND	0.051	µg/L	1		11/22/2016 18:36
Benzo[b]fluoranthene	ldi	A	ND	0.051	µg/L	1		11/22/2016 18:36
Benzo[g,h,i]perylene	ldi	A	ND	0.10	µg/L	1		11/22/2016 18:36
Benzo[k]fluoranthene	ldi	A	ND	0.051	µg/L	1		11/22/2016 18:36
Chrysene	ldi	A	ND	0.25	µg/L	1		11/22/2016 18:36
Dibenz[a,h]anthracene	ldi	A	ND	0.051	µg/L	1		11/22/2016 18:36
Fluoranthene	ldi	A	0.48	0.25	µg/L	1		11/22/2016 18:36
Fluorene	ldi	A	3.4	0.25	µg/L	1		11/22/2016 18:36
Indeno[1,2,3-cd]pyrene	ldi	A	ND	0.051	µg/L	1		11/22/2016 18:36
Naphthalene	ldi	A	11	2.5	µg/L	10		11/23/2016 13:26
Phenanthrene	ldi	A	5.4	2.5	µg/L	10		11/23/2016 13:26
Pyrene	ldi	A	1.7	0.25	µg/L	1		11/22/2016 18:36
1-Methylnaphthalene	I	B	20	2.5	µg/L	10		11/23/2016 13:26
2-Methylnaphthalene	I	B	13	0.51	µg/L	10		11/23/2016 13:26
Surr. 2-Fluorobiphenyl	S		48.1	10-110	%REC	1		11/22/2016 18:36
Surr. Nitrobenzene-d5	S		61.6	10-110	%REC	1		11/22/2016 18:36
Surr. Terphenyl-d14	S		29.0	16.8-110	%REC	1		11/22/2016 18:36

Method: SW-846 8260B

Analyst: jin

Prep Date/Time: 11/28/2016 10:30

BTEX and MTBE

Benzene	dil	A	ND	5.0	µg/L	1		11/28/2016 15:40
Ethylbenzene	dil	A	16	5.0	µg/L	1		11/28/2016 15:40
m,p-Xylene	dil	A	36	5.0	µg/L	1		11/28/2016 15:40
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1		11/28/2016 15:40
o-Xylene	dil	A	36	5.0	µg/L	1		11/28/2016 15:40
Toluene	dil	A	ND	5.0	µg/L	1		11/28/2016 15:40
Total Xylenes	dil	M	72	5.0	µg/L	1		11/28/2016 15:40
Surr. 4-Bromofluorobenzene	S		92.7	80-120	%REC	1		11/28/2016 15:40

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Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.					
Client Project:	AM Locomotive Shop					
Client Sample ID:	RW-3		Work Order/ID:	16K1374-04		
Sample Description:			Sampled:	11/18/2016 11:32		
Matrix:	Aqueous		Received:	11/18/2016 16:40		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								
Prep Method: 40CFR136								
Prep Date/Time: 11/22/2016 09:15								
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	1.7	0.25	µg/L	1	11/22/2016 18:57	
Acenaphthylene	ldi	A	ND	0.25	µg/L	1	11/22/2016 18:57	
Anthracene	ldi	A	ND	0.25	µg/L	1	11/22/2016 18:57	
Benz[a]anthracene	ldi	A	0.090	0.050	µg/L	1	11/22/2016 18:57	
Benz[a]pyrene	ldi	A	ND	0.050	µg/L	1	11/22/2016 18:57	
Benz[b]fluoranthene	ldi	A	0.055	0.050	µg/L	1	11/22/2016 18:57	
Benz[g,h,i]perylene	ldi	A	ND	0.10	µg/L	1	11/22/2016 18:57	
Benz[k]fluoranthene	ldi	A	ND	0.050	µg/L	1	11/22/2016 18:57	
Chrysene	ldi	A	ND	0.25	µg/L	1	11/22/2016 18:57	
Dibenz[a,h]anthracene	ldi	A	ND	0.050	µg/L	1	11/22/2016 18:57	
Fluoranthene	ldi	A	0.71	0.25	µg/L	1	11/22/2016 18:57	
Fluorene	ldi	A	5.9	5.0	µg/L	20	11/23/2016 13:47	
Indeno[1,2,3cd]pyrene	ldi	A	ND	0.050	µg/L	1	11/22/2016 18:57	
Naphthalene	ldi	A	24	5.0	µg/L	20	11/23/2016 13:47	
Phenanthere	ldi	A	9.5	5.0	µg/L	20	11/23/2016 13:47	
Pyrene	ldi	A	2.2	0.25	µg/L	1	11/22/2016 18:57	
1-Methylnaphthalene	I	B	46	5.0	µg/L	20	11/23/2016 13:47	
2-Methylnaphthalene	I	B	45	1.0	µg/L	20	11/23/2016 13:47	
Surr: 2-Fluorobiphenyl	S		46.3	10-110	%REC	1	11/22/2016 18:57	
Surr: Nitrobenzene-d5	S		90.8	10-110	%REC	1	11/22/2016 18:57	
Surr: Terphenyl-d14	S		33.9	16.8-110	%REC	1	11/22/2016 18:57	

Method: SW-846 8260B

Analyst:jlb

Prep Date/Time: 11/28/2016 10:30

BTEX and MTBE	dil	AT	Result	RL	Qual	Units	DF	Analyzed
Benzene	dil	A	ND	5.0	µg/L	1	11/28/2016 16:01	
Ethylbenzene	dil	A	24	5.0	µg/L	1	11/28/2016 16:01	
m,p-Xylene	dil	A	41	5.0	µg/L	1	11/28/2016 16:01	
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 16:01	
o-Xylene	dil	A	89	5.0	µg/L	1	11/28/2016 16:01	
Toluene	dil	A	ND	5.0	µg/L	1	11/28/2016 16:01	
Total Xylenes	dil	M	130	5.0	µg/L	1	11/28/2016 16:01	
Surr: 4-BromoFluorobenzene	S		95.2	80-120	%REC	1	11/28/2016 16:01	

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Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.						
Client Project:	AM Locomotive Shop						
Client Sample ID:	FP-1			Work Order/ID:	16K1374-05		
Sample Description:				Sampled:	11/18/2016 12:30		
Matrix:	Aqueous			Received:	11/18/2016 16:40		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyst
	Method: SW-846 8270C				Analyst: CLR			
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	3.6	0.26	µg/L	1	11/22/2016 19:17	
Acenaphthylene	ldi	A	0.51	0.26	µg/L	1	11/22/2016 19:17	
Anthracene	ldi	A	1.3	0.26	µg/L	1	11/22/2016 19:17	
Benz[a]anthracene	ldi	A	0.077	0.052	µg/L	1	11/22/2016 19:17	
Benz[a]pyrene	ldi	A	ND	0.052	µg/L	1	11/22/2016 19:17	
Benz[b]fluoranthene	ldi	A	0.067	0.052	µg/L	1	11/22/2016 19:17	
Benz[ghi]perylene	ldi	A	ND	0.10	µg/L	1	11/22/2016 19:17	
Benzol[k]fluoranthene	ldi	A	ND	0.052	µg/L	1	11/22/2016 19:17	
Chrysene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:17	
Dibenz[a,h]anthracene	ldi	A	ND	0.052	µg/L	1	11/22/2016 19:17	
Fluoranthene	ldi	A	0.41	0.26	µg/L	1	11/22/2016 19:17	
Fluorene	ldi	A	4.5	0.26	µg/L	1	11/22/2016 19:17	
Indeno[1,2,3-cd]pyrene	ldi	A	ND	0.052	µg/L	1	11/22/2016 19:17	
Naphthalene	ldi	A	27	2.6	µg/L	10	11/23/2016 14:07	
Phenanthrene	ldi	A	5.4	2.6	µg/L	10	11/23/2016 14:07	
Pyrene	ldi	A	1.7	0.26	µg/L	1	11/22/2016 19:17	
1-Methylnaphthalene	I	B	31	2.6	µg/L	10	11/23/2016 14:07	
2-Methylnaphthalene	I	B	3.9	0.052	µg/L	1	11/22/2016 19:17	
Surr: 2-Fluorobiphenyl	S		66.8	10-110	%REC	1	11/22/2016 19:17	
Surr: Nitrobenzene-d5	S		95.8	10-110	%REC	1	11/22/2016 19:17	
Surr: Terphenyl-d14	S		50.5	16.8-110	%REC	1	11/22/2016 19:17	

BTEX and MTBE	Method: SW-846 8260B				Analyst: jin			
					Prep Date/Time: 11/28/2016 10:30			
Benzene	dil	A	ND	5.0	µg/L	1	11/28/2016 16:22	
Ethylbenzene	dil	A	84	5.0	µg/L	1	11/28/2016 16:22	
m,p-Xylene	dil	A	250	25	µg/L	5	11/29/2016 12:18	
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 16:22	
o-Xylene	dil	A	31	5.0	µg/L	1	11/28/2016 16:22	
Toluene	dil	A	ND	5.0	µg/L	1	11/28/2016 16:22	
Total Xylenes	dil	M	290	25	µg/L	5	11/29/2016 12:18	
Surr: 4-Bromofluorobenzene	S		93.9	80-120	%REC	1	11/28/2016 16:22	

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Analytical Results

Date: Wednesday, November 30, 2016

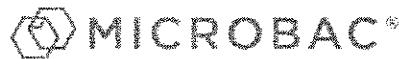
Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	16K1374-06
Client Project:	AM Locomotive Shop	Sampled:	11/18/2016 12:30
Client Sample ID:	Field Blank	Received:	11/18/2016 16:40
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C							Analyst: CLR	
Prep Method: 40CFR136							Prep Date/Time: 11/22/2016 09:15	
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Acenaphthylene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Anthracene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Benz[a]anthracene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Benz[a]pyrene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Benz[b]fluoranthene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Benz[g,h,i]perylene	ldi	A	ND	0.11	µg/L	1	11/22/2016 19:37	
Benz[k]fluoranthene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Chrysene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Dibenz[a,h]anthracene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Fluoranthene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Fluorene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Indeno[1,2,3cd]pyrene	ldi	A	ND	0.053	µg/L	1	11/22/2016 19:37	
Naphthalene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Phenanthrene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
Pyrene	ldi	A	ND	0.26	µg/L	1	11/22/2016 19:37	
1-MethylNaphthalene	I	B	ND	0.26	µg/L	1	11/22/2016 19:37	
2-MethylNaphthalene	I	B	ND	0.053	µg/L	1	11/22/2016 19:37	
Surr: 2-Fluorobiphenyl	S	55.8		10-110	%REC	1	11/22/2016 19:37	
Surr: Nitrobenzene- <i>o</i> 5	S	59.9		10-110	%REC	1	11/22/2016 19:37	
Surr: Terphenyl-d14	S	77.1		16.8-110	%REC	1	11/22/2016 19:37	

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8260B							Analyst:jhn	
Prep Date/Time: 11/28/2016 10:30								
BTEX and MTBE								
Benzene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
Ethylbenzene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
m,p-Xylene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
o-Xylene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
Toluene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:53	
Total Xylenes	dil	M	ND	5.0	µg/L	1	11/28/2016 11:53	
Surr: 4-Bromofluorobenzene	S	89.3		80-120	%REC	1	11/28/2016 11:53	

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Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	16K1374-07
Client Project:	AM Locomotive Shop	Sampled:	11/18/2016 13:20
Client Sample ID:	F-4	Received:	11/18/2016 16:40
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C							Analyst:CLR	
Prep Method: 40CFR136							Prep Date/Time: 11/22/2016 09:15	
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	8.5	2.6	μg/L	10	11/23/2016 14:28	
Acenaphthylene	ldi	A	1.9	0.26	μg/L	1	11/22/2016 19:57	
Anthracene	ldi	A	5.0	0.26	μg/L	1	11/22/2016 19:57	
Benz[a]anthracene	ldi	A	0.11	0.052	μg/L	1	11/22/2016 19:57	
Benz[a]pyrene	ldi	A	ND	0.052	μg/L	1	11/22/2016 19:57	
Benz[b]fluoranthene	ldi	A	ND	0.052	μg/L	1	11/22/2016 19:57	
Benz[g,h,i]perylene	ldi	A	ND	0.10	μg/L	1	11/22/2016 19:57	
Benz[k]fluoranthene	ldi	A	ND	0.052	μg/L	1	11/22/2016 19:57	
Chrysene	ldi	A	ND	0.26	μg/L	1	11/22/2016 19:57	
Dibenz[a,h]anthracene	ldi	A	ND	0.052	μg/L	1	11/22/2016 19:57	
Fluoranthene	ldi	A	0.78	0.26	μg/L	1	11/22/2016 19:57	
Fluorene	ldi	A	0.51	0.26	μg/L	1	11/22/2016 19:57	
Indeno[1,2,3cd]pyrene	ldi	A	ND	0.052	μg/L	1	11/22/2016 19:57	
Naphthalene	ldi	A	320	26	μg/L	100	11/23/2016 14:48	
Phenanthrene	ldi	A	27	2.6	μg/L	10	11/23/2016 14:28	
Pyrene	ldi	A	2.6	0.26	μg/L	1	11/22/2016 19:57	
1-Methylnaphthalene	I	B	230	26	μg/L	100	11/23/2016 14:48	
2-Methylnaphthalene	I	B	320	5.2	μg/L	100	11/23/2016 14:48	
Surr: 2-Fluorobiphenyl	S		47.3	10-110	%REC	1	11/22/2016 19:57	
Surr: Nitrobenzene-d5	S		131	10-110	S %REC	1	11/22/2016 19:57	
Surr: Terphenyl-d14	S		46.4	16.8-110	%REC	1	11/22/2016 19:57	

BTEX and MTBE				Method: SW-846 8260B			Analyst:jin
Benzene	dil	A	210	50	μg/L	10	11/29/2016 12:40
Ethylbenzene	dil	A	500	50	μg/L	10	11/29/2016 12:40
m,p-Xylene	dil	A	950	50	μg/L	10	11/29/2016 12:40
Methyl-t-Butyl Ether	dil	A	ND	5.0	μg/L	1	11/28/2016 16:44
o-Xylene	dil	A	ND	5.0	μg/L	1	11/28/2016 16:44
Toluene	dil	A	ND	5.0	μg/L	1	11/28/2016 16:44
Total Xylenes	dil	M	960	50	μg/L	10	11/29/2016 12:40
Surr: 4-Bromofluorobenzene		S	94.0	80-120	%REC	1	11/28/2016 16:44

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Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.						
Client Project:	AM Locomotive Shop						
Client Sample ID:	FP-5				Work Order/ID:	16K1374-08	
Sample Description:					Sampled:	11/18/2016 13:59	
Matrix:	Aqueous				Received:	11/18/2016 16:40	

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								
Prep Method: 40CFR136								
Prep Date/Time: 11/22/2016 09:15								
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	2.4	0.26	µg/L	1	11/22/2016 20:58	
Acenaphthylene	ldi	A	1.3	0.26	µg/L	1	11/22/2016 20:58	
Anthracene	ldi	A	3.3	0.26	µg/L	1	11/22/2016 20:58	
Benz[a]anthracene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Benz[a]pyrene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Benz[b]fluoranthene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Benz[g,h,i]perylene	ldi	A	ND	0.10	µg/L	1	11/22/2016 20:58	
Benz[k]fluoranthene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Chrysene	ldi	A	ND	0.26	µg/L	1	11/22/2016 20:58	
Dibenz[a,h]anthracene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Fluoranthene	ldi	A	0.48	0.26	µg/L	1	11/22/2016 20:58	
Fluorene	ldi	A	11	2.6	µg/L	10	11/23/2016 15:09	
Indeno[1,2,3cd]pyrene	ldi	A	ND	0.051	µg/L	1	11/22/2016 20:58	
Naphthalene	ldi	A	230	26	µg/L	100	11/23/2016 15:29	
Phenanthrene	ldi	A	17	2.6	µg/L	10	11/23/2016 15:09	
Pyrene	ldi	A	1.5	0.26	µg/L	1	11/22/2016 20:58	
1-Methylnaphthalene	I	B	160	26	µg/L	100	11/23/2016 15:29	
2-Methylnaphthalene	I	B	210	5.1	µg/L	100	11/23/2016 15:29	
Surr: 2-Fluorobiphenyl		S	60.8	10-110	%REC	1	11/22/2016 20:58	
Surr: Nitrobenzene-d5		S	79.9	10-110	%REC	1	11/22/2016 20:58	
Surr: Terphenyl-d14		S	46.8	16.8-110	%REC	1	11/22/2016 20:58	
Method: SW-846 8260B								
Analyst:jin								
Prep Date/Time: 11/29/2016 10:45								
BTEX and MTBE								
Benzene	dil	A	200	50	µg/L	10	11/29/2016 13:01	
Ethylbenzene	dil	A	530	50	µg/L	10	11/29/2016 13:01	
m,p-Xylene	dil	A	960	50	µg/L	10	11/29/2016 13:01	
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 17:48	
o-Xylene	dil	A	25	5.0	µg/L	1	11/28/2016 17:48	
Toluene	dil	A	12	5.0	µg/L	1	11/28/2016 17:48	
Total Xylenes	dil	M	980	50	µg/L	10	11/29/2016 13:01	
Surr: 4-Bromofluorobenzene		S	94.3	80-120	%REC	1	11/28/2016 17:48	

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Analytical Results

Date: Wednesday, November 30, 2016

Client: Arcelor Mittal USA, Inc.
 Client Project: AM Locomotive Shop
 Client Sample ID: FP-6
 Sample Description:
 Matrix: Aqueous

Work Order/ID: 16K1374-09
 Sampled: 11/18/2016 14:47
 Received: 11/18/2016 16:40

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								Analyst: CLR
Prep Method: 40CFR136								Prep Date/Time: 11/22/2016 09:15
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	Idi	A	5.7		2.6	µg/L	10	11/23/2016 15:49
Acenaphthylene	Idi	A	1.0		0.26	µg/L	1	11/22/2016 21:18
Anthracene	Idi	A	ND		0.26	µg/L	1	11/22/2016 21:18
Benz[a]anthracene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Benz[a]pyrene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Benzo[b]fluoranthene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Benzo[g,h,i]perylene	Idi	A	ND		0.10	µg/L	1	11/22/2016 21:18
Benzo[k]fluoranthene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Chrysene	Idi	A	ND		0.26	µg/L	1	11/22/2016 21:18
Dibenz[a,h]anthracene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Fluoranthene	Idi	A	0.34		0.26	µg/L	1	11/22/2016 21:18
Fluorene	Idi	A	9.8		2.6	µg/L	10	11/23/2016 15:49
Indeno[1,2,3-cd]pyrene	Idi	A	ND		0.051	µg/L	1	11/22/2016 21:18
Naphthalene	Idi	A	170		26	µg/L	100	11/23/2016 16:10
Phenanthrene	Idi	A	13		2.6	µg/L	10	11/23/2016 15:49
Pyrene	Idi	A	1.2		0.26	µg/L	1	11/22/2016 21:18
1-Methylnaphthalene	I	B	140		26	µg/L	100	11/23/2016 16:10
2-Methylnaphthalene	I	B	160		5.1	µg/L	100	11/23/2016 16:10
Surr: 2-Fluorobiphenyl	S		58.9		10-110	%REC	1	11/22/2016 21:18
Surr: Nitrobenzene-d5	S		89.0		10-110	%REC	1	11/22/2016 21:18
Surr: Terphenyl-d14	S		40.6		16.8-110	%REC	1	11/22/2016 21:18

Method: SW-846 8260B

Analyst: jin

BTEX and MTBE

Prep Date/Time: 11/28/2016 10:30

Benzene	dil	A	110		5.0	µg/L	1	11/28/2016 18:09
Ethylbenzene	dil	A	480		50	µg/L	10	11/29/2016 13:22
m,p-Xylene	dil	A	1400		50	µg/L	10	11/29/2016 13:22
Methyl-t-Butyl Ether	dil	A	ND		5.0	µg/L	1	11/28/2016 18:09
o-Xylene	dil	A	320		50	µg/L	10	11/29/2016 13:22
Toluene	dil	A	95		5.0	µg/L	1	11/28/2016 18:09
Total Xylenes	dil	M	1700		50	µg/L	10	11/29/2016 13:22
Surr: 4-Bromofluorobenzene	S		94.0		80-120	%REC	1	11/28/2016 18:09

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Analytical Results

Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	16K1374-10
Client Project:	AM Locomotive Shop	Sampled:	11/18/2016 13:30
Client Sample ID:	Dup-1	Received:	11/18/2016 16:40
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8270C								Analyst: CLR
Prep Method: 40CFR136								Prep Date/Time: 11/23/2016 09:36
LL Polynuclear Aromatic Hydrocarbons by GC/MS								
Acenaphthene	ldi	A	5.0	0.26	µg/L	1	11/28/2016 13:25	
Acenaphthylene	ldi	A	1.2	0.26	µg/L	1	11/28/2016 13:25	
Anthracene	ldi	A	1.3	0.26	µg/L	1	11/28/2016 13:25	
Benz[a]anthracene	ldi	A	0.057	0.052	µg/L	1	11/28/2016 13:25	
Benz[a]pyrene	ldi	A	ND	0.052	µg/L	1	11/28/2016 13:25	
Benz[b]fluoranthene	ldi	A	ND	0.052	µg/L	1	11/28/2016 13:25	
Benz[g,h,i]perylene	ldi	A	ND	0.10	µg/L	1	11/28/2016 13:25	
Benz[k]fluoranthene	ldi	A	ND	0.052	µg/L	1	11/28/2016 13:25	
Chrysene	ldi	A	ND	0.26	µg/L	1	11/28/2016 13:25	
Dibenz[a,h]anthracene	ldi	A	ND	0.052	µg/L	1	11/28/2016 13:25	
Fluoranthene	ldi	A	0.47	0.26	µg/L	1	11/28/2016 13:25	
Fluorene	ldi	A	11	2.6	µg/L	10	11/28/2016 14:07	
Indeno[1,2,3cd]pyrene	ldi	A	ND	0.052	µg/L	1	11/28/2016 13:25	
Naphthalene	ldi	A	220	26	µg/L	100	11/28/2016 14:28	
Phenanthrene	ldi	A	16	2.6	µg/L	10	11/28/2016 14:07	
Pyrene	ldi	A	1.5	0.26	µg/L	1	11/28/2016 13:25	
1-Methylnaphthalene	I	B	160	26	µg/L	100	11/28/2016 14:28	
2-Methylnaphthalene	I	B	200	5.2	µg/L	100	11/28/2016 14:28	
Surr: 2-Fluorobiphenyl	S		63.6	10-110	%REC	1	11/28/2016 13:25	
Surr: Nitrobenzene-d5	S		80.6	10-110	%REC	1	11/28/2016 13:25	
Surr: Terphenyl-d14	S		44.0	16.8-110	%REC	1	11/28/2016 13:25	

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SW-846 8260B								Analyst: jln
Prep Date/Time: 11/29/2016 10:45								
BTEX and MTBE								
Benzene	dil	A	210	50	µg/L	10	11/29/2016 13:44	
Ethylbenzene	dil	A	530	50	µg/L	10	11/29/2016 13:44	
m,p-Xylene	dil	A	940	50	µg/L	10	11/29/2016 13:44	
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 18:30	
c-Xylene	dil	A	25	5.0	µg/L	1	11/28/2016 18:30	
Toluene	dil	A	12	5.0	µg/L	1	11/28/2016 18:30	
Total Xylenes	dil	M	960	50	µg/L	10	11/29/2016 13:44	
Surr: 4-Bromofluorobenzene	S		94.5	80-120	%REC	1	11/28/2016 18:30	

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Analytical Results

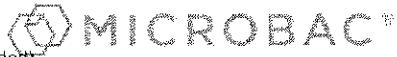
Date: Wednesday, November 30, 2016

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	16K1374-11
Client Project:	AM Locomotive Shop	Sampled:	11/18/2016 0:00
Client Sample ID:	TB	Received:	11/18/2016 16:40
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed	
								Analyst:jln	
BTEX and MTBE									
Benzene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
Ethylbenzene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
m,p-Xylene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
Methyl-t-Butyl Ether	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
o-Xylene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
Toluene	dil	A	ND	5.0	µg/L	1	11/28/2016 11:32		
Total Xylenes	dil	M	ND	5.0	µg/L	1	11/28/2016 11:32		
Surrogate: 4-Bromofluorobenzene	S	91.0	80-120	%REC		1	11/28/2016 11:32		

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FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
LOQ = Limit of Quantitation
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Sur = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent
* = Result exceeds project specific limits

ANALYTE TYPES: (AT)

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

BLK = Method Blank	ICSA = Interference Check Standard "A"
DUP = Method Duplicate	ICSAB = Interference Check Standard "AB"
BS = Method Blank Spike	BSD = Method Blank Spike Duplicate
MS = Matrix Spike	MSD = Matrix Spike Duplicate
ICB = Initial Calibration Blank	ICV = Initial Calibration Verification
CCB = Continuing Calibration Blank	CCV = Continuing Calibration Verification
CRL = Client Required Reporting Limit	OPR = Ongoing Precision and Recovery Standard
PDS = Post Digestion Spike	SD = Serial Dilution
QCS = Quality Control Standard	

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- ^d Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
- ⁱ Kansas Dept Health & Env. NELAP (#E-10397)
- ^l North Carolina DENR NPDES effluent, surface water (#597)



Sample ID	Client Sample ID	Comments
16K1374-01	RW-1	
16K1374-02	RW-2	
16K1374-03	RW-4	
16K1374-04	RW-3	
16K1374-05	FP-1	
16K1374-06	Field Blank	
16K1374-07	F-4	
16K1374-08	FP-5	
16K1374-09	FP-6	
16K1374-10	Dup-1	
16K1374-11	TB	

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11/17/2016
18K1374
Arcelor Mittal Burns Harbor, Inc.
AM Laboratories
Cease Cesze
Burns Harbor, IN

MICROBAC®

Samples 250 West 84th Drive
Submitted to: Merrillville, IN 46410
Tel: 219-769-8378
Fax: 219-769-1664

5713 West 85th Street
Indianapolis, IN 46278
Tel: 317-872-1375
Fax: 317-872-1379

Chain of Custody Record

Number **138073**

Instructions on back

Project	2387-354-04-12	Turnaround Time	Report Type
Location	LOCO SHOP	<input checked="" type="checkbox"/> Routine (5 to 7 business days)	<input type="checkbox"/> Results Only <input type="checkbox"/> Level II
PO #		<input type="checkbox"/> RUSH* (notify lab)	<input type="checkbox"/> Level III <input type="checkbox"/> Level III CLP-like
Compliance Monitoring? <input type="checkbox"/> Yes <input type="checkbox"/> No		(needed by)	<input type="checkbox"/> Level IV <input type="checkbox"/> Level IV CLP-like
#	(1) Agency/Program		<input type="checkbox"/> EDD

(PRINT)

PATRICK KOJ-TRO

Sampler Signature

Patricia

Sampler Phone # **219 808 9099**

at via Mail Telephone Fax (fax #)

E-mail (address)

TKTKD@arc4erf.STANFORD.EDU.CGP.CO

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Biculfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	For Lab Use Only								
									RW-1	RW-2	RW-3	RW-4	RW-5	RW-6	RW-7	RW-8	RW-9
RW-1	FQ	*			11-18-16	0940	5	X X									16K1374
RW-2						1013	1										01
RW-4						1057	1										02
RW-3						1132	1										03
FP-1						1230	1										04
Fred Blank						1230	1										05
FP-4						1320	1										06
FP-5						1359	1										07
FP-6						1447	1										08
																	09

Possible Hazard Identification

Hazardous Non-Hazardous Radioactive

Sample Disposition Dispose as appropriate Return Archive

Comments	To be completed by Microbac			Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	Temperature Upon Receipt (°C)	Relinquished By (signature)	Date/Time				
FP-4=ms/msd NK#3 11-18-16	62-1-0=5.2	<i>Patricia</i>	11-18-16 1640				
Samples Received on Ice?		Relinquished By (signature)	Date/Time		Received By (signature)		Date/Time
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A							
Custody Seals Intact?		Relinquished By (signature)	Date/Time		Received By (signature)		Date/Time
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A							



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Submitted to: Merillville, IN 46418
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Fax: 219-769-1664

[] 5713 West 85th Street
Indianapolis, IN 46278
Tel: 317-872-1375
Fax: 317-872-1379

Chain of Custody Re

三

Number 138074

Instructions on back

Client Name		Project #	Instructions on back	
Arrellier Mittal Burns Arbor		3397-354-0412		
Address		Location	Turnaround Time	Report Type
		600 SHOP	<input checked="" type="checkbox"/> Routine (5 to 7 business days) <input type="checkbox"/> RUSH* (notify lab)	<input checked="" type="checkbox"/> Results Only <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> EDD
City, State, Zip		PO #		<input type="checkbox"/> Level III CLP-like <input type="checkbox"/> Level IV CLP-like
Contact		Compliance Monitoring? <input type="checkbox"/> Yes <input type="checkbox"/> No	(needed by)	
Telephone #		(1) Agency/Program		
Sampled by (PRINT)		Sampler Signature	Sampler Phone #	
Send Report via				
		<input type="checkbox"/> Mail <input type="checkbox"/> Telephone <input type="checkbox"/> Fax (fax #)	[] e-mail (address)	2198089099 Sstanford@WCRP.COM

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

*** Preservative Types:** (1) HNO₃, (2) H₂SO₄, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (10) Unpreserved

Possible Hazard Identification

Hazardous Non-Hazardous Radioactive

Sample Disposition

A set of small, light-gray navigation icons typically found in LaTeX Beamer presentations, including symbols for back, forward, search, and table of contents.

118 pages - \$14.95

Comments

To be completed by: _____

To be completed by HHS/ODAC				
Temperature Upon Receipt (°C)	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
62/0-8.2	Dale Shultz	11-18-16 1640		
Samples Received on Ice?	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Yes No N/A				
Custody Seals Intact?	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Yes No N/A			Nagle, Diane	11-18-16

